

Fig.1

FIRST PREFERRED EMBODIMENT

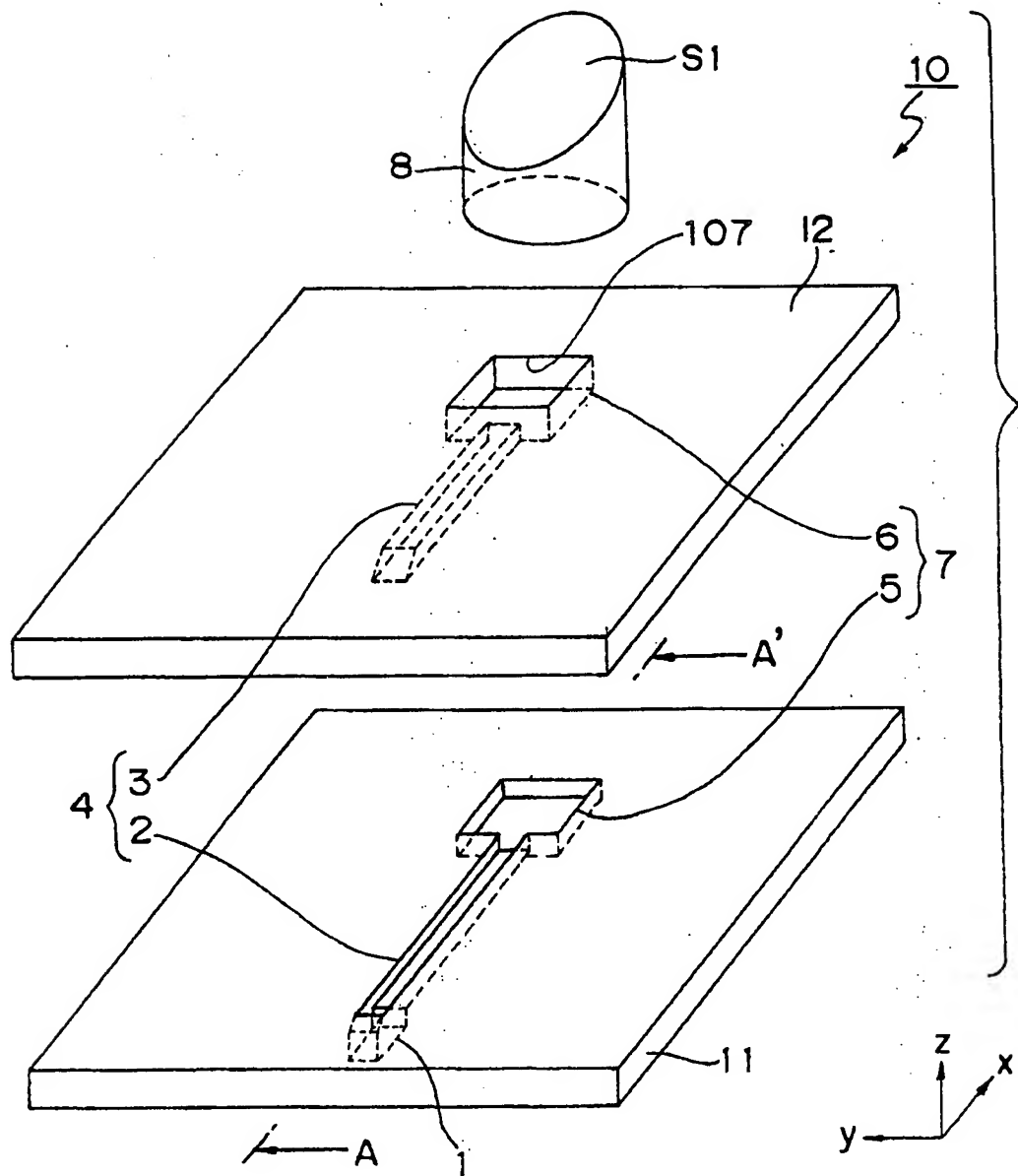


Fig. 2

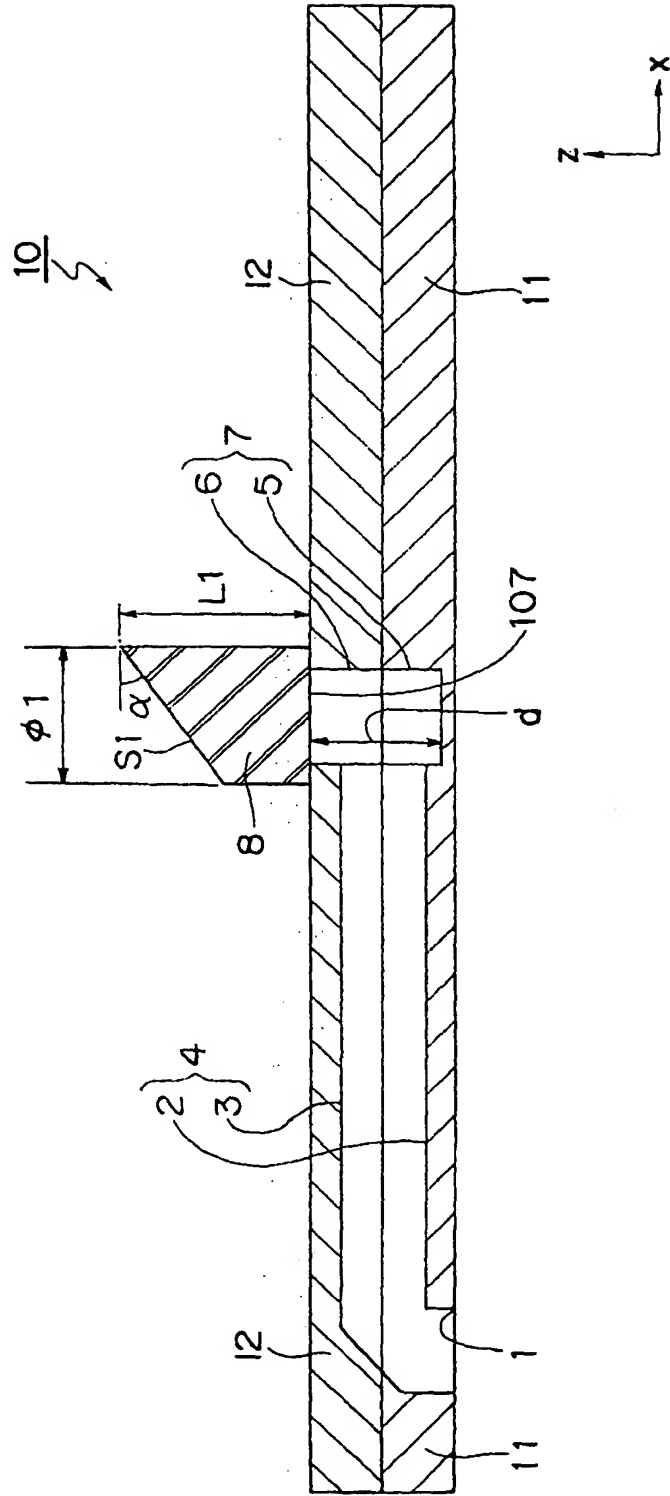


Fig. 3

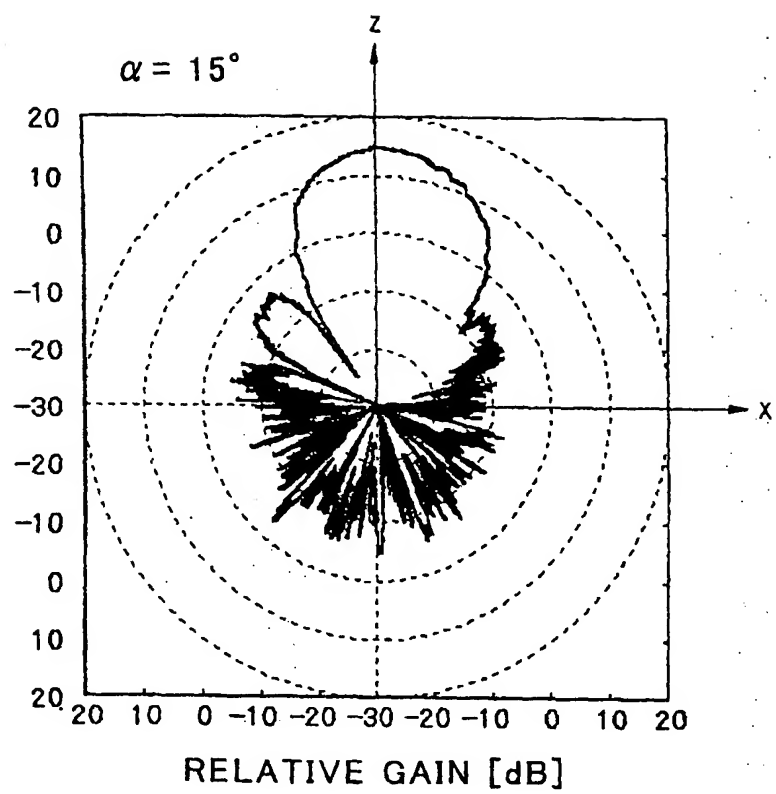


Fig. 4

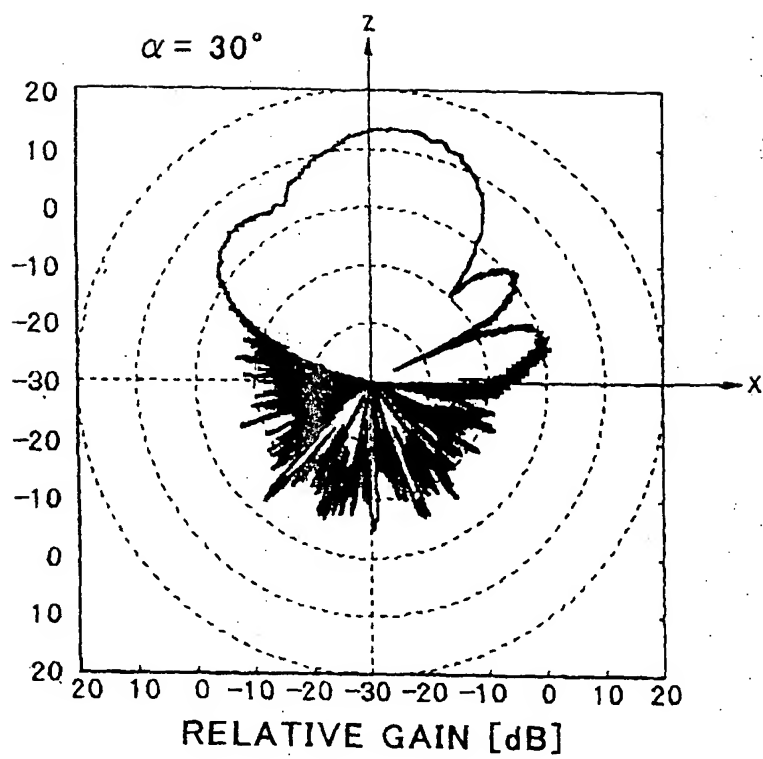


Fig. 5

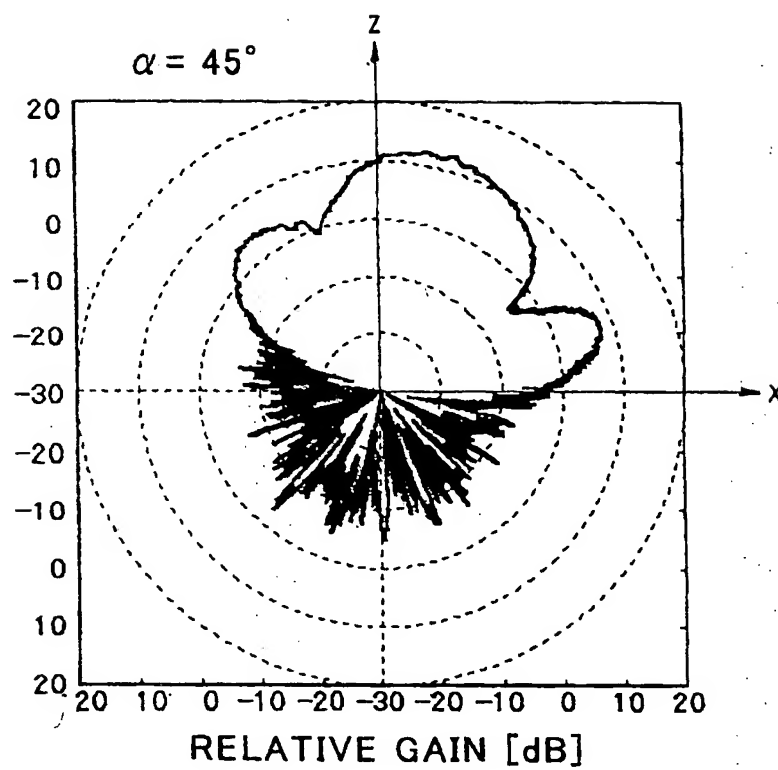


Fig.6

FIRST MODIFIED PREFERRED EMBODIMENT
OF FIRST PREFERRED EMBODIMENT

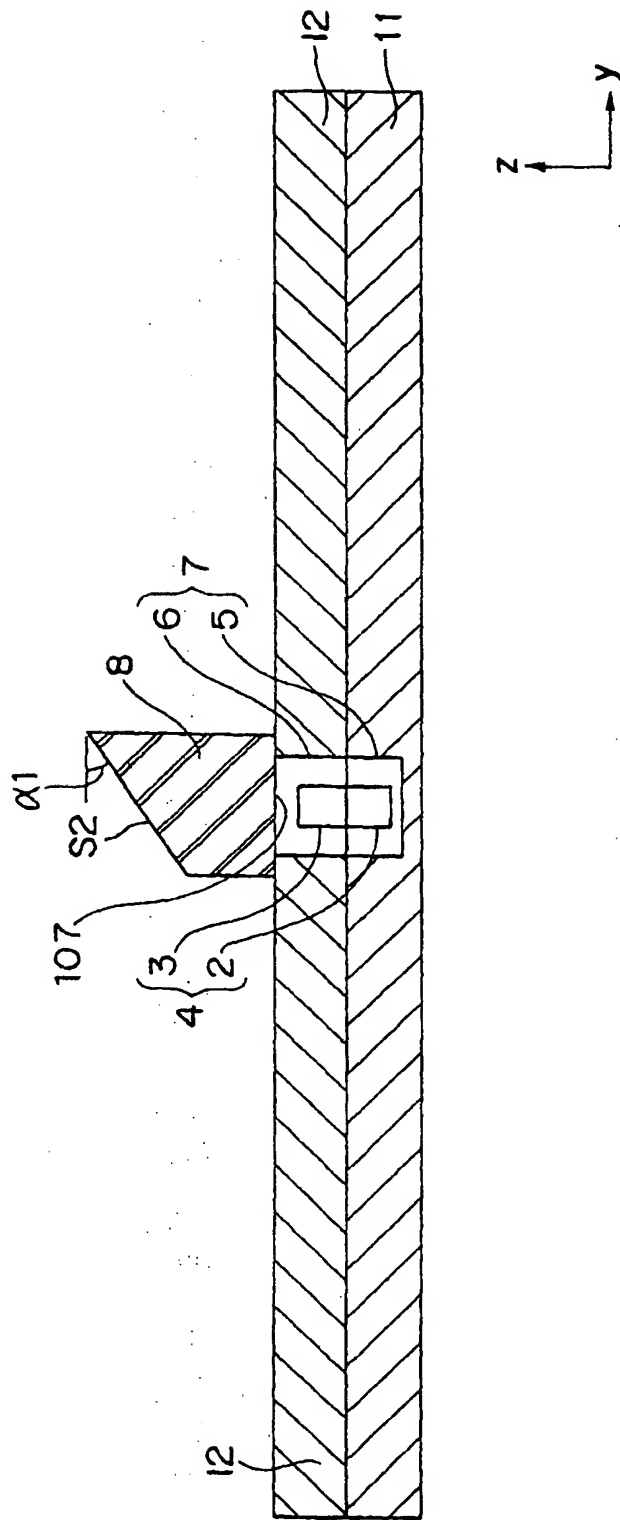


Fig.7

SECOND MODIFIED PREFERRED EMBODIMENT
OF FIRST PREFERRED EMBODIMENT

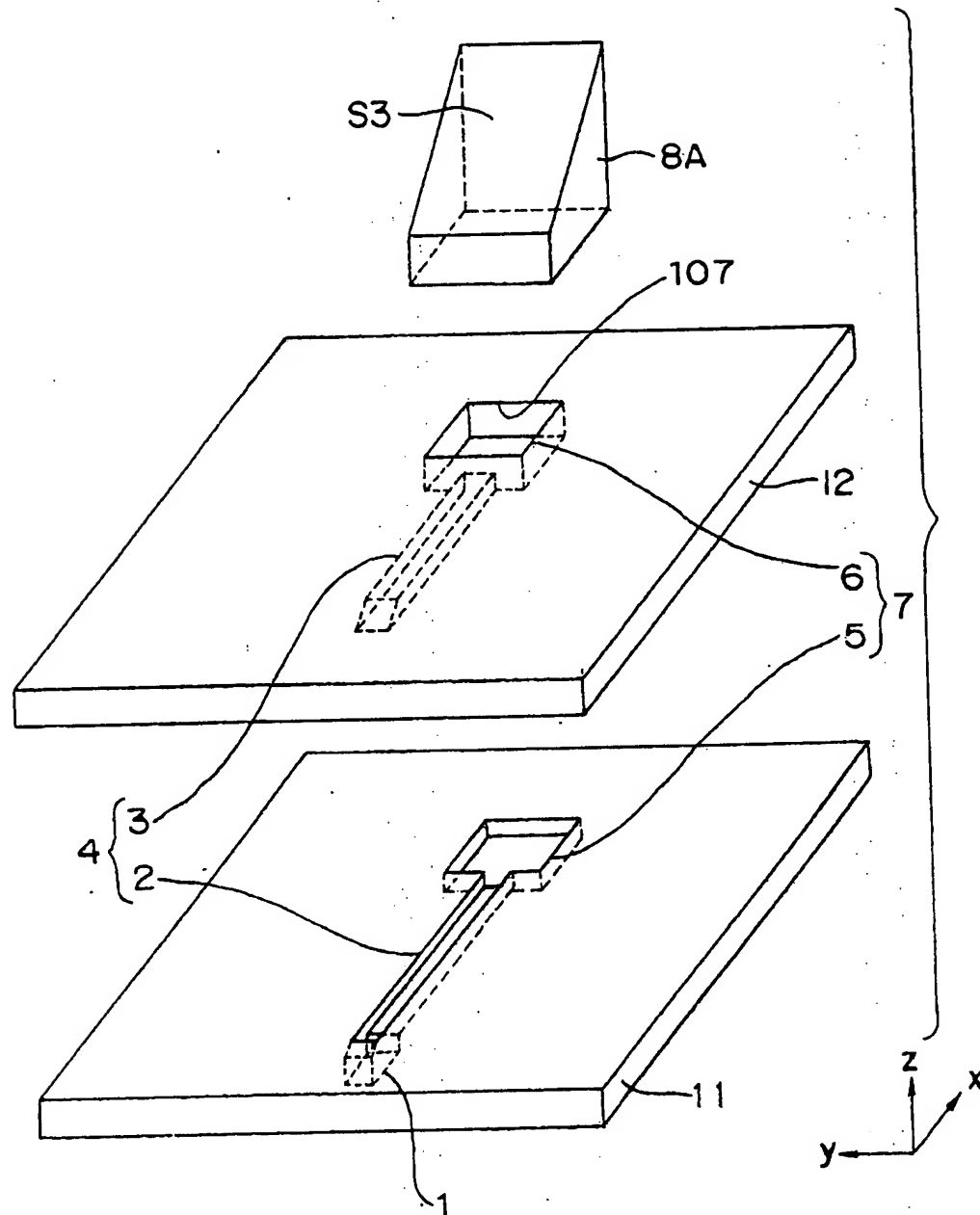


Fig.8

SECOND PREFERRED EMBODIMENT

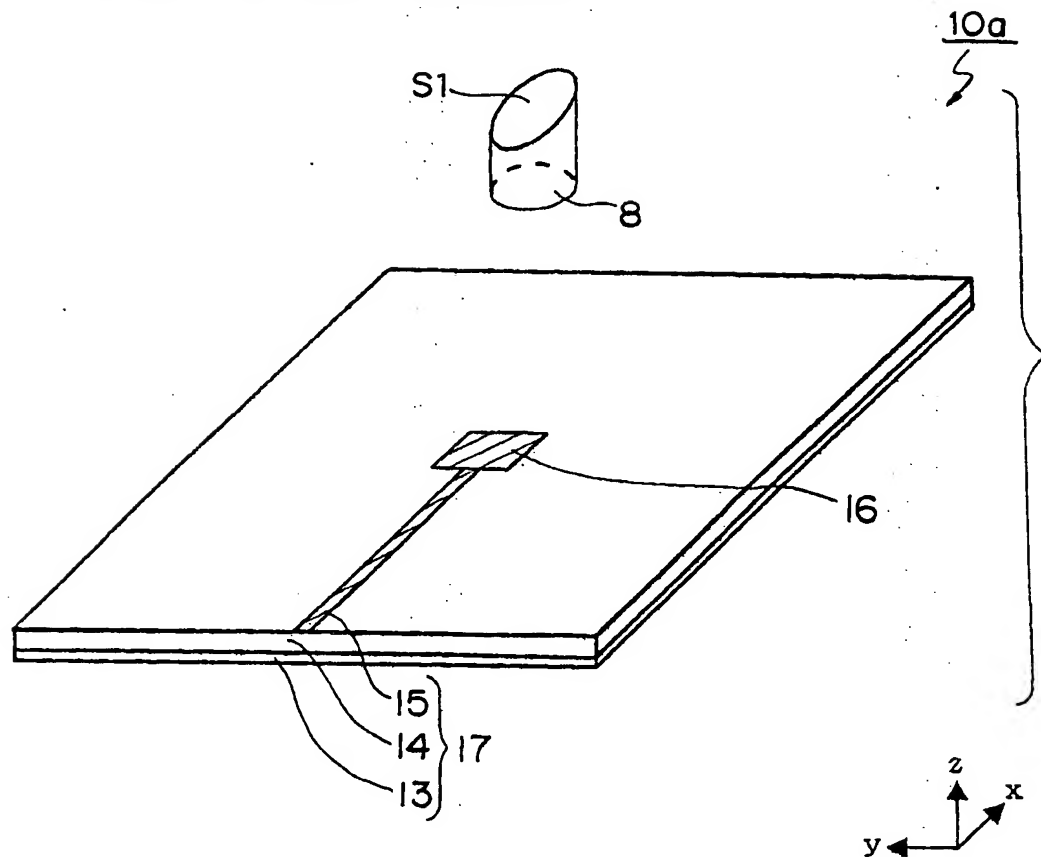


Fig. 9

THIRD PREFERRED EMBODIMENT

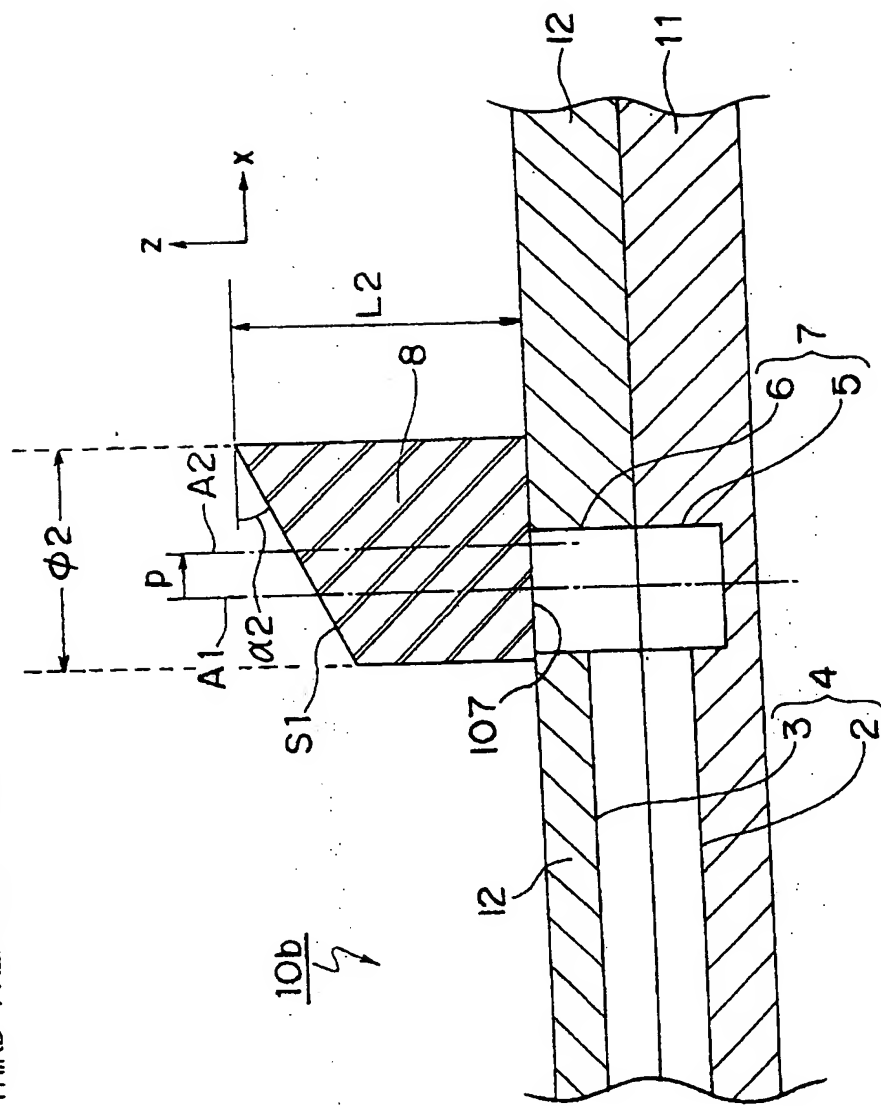


Fig. 10

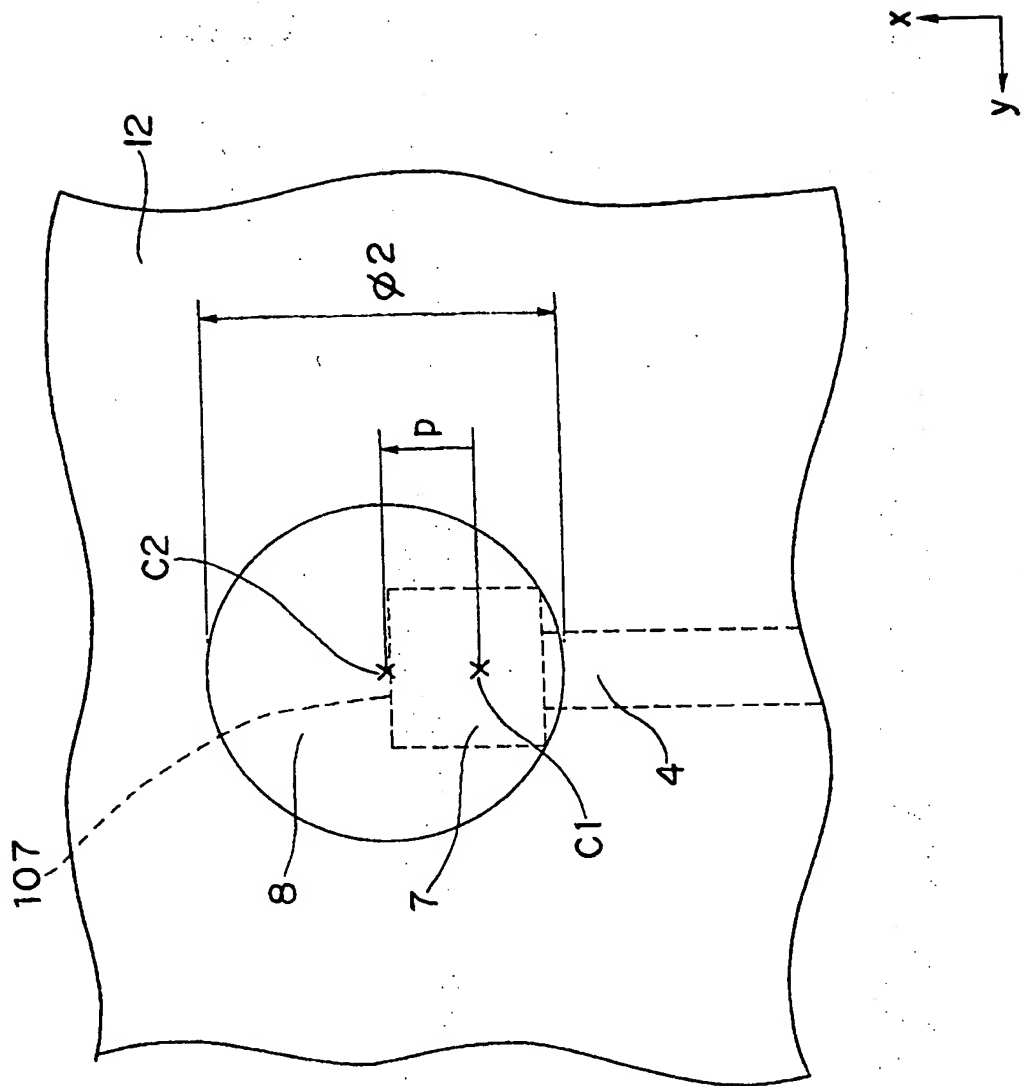


Fig. 11

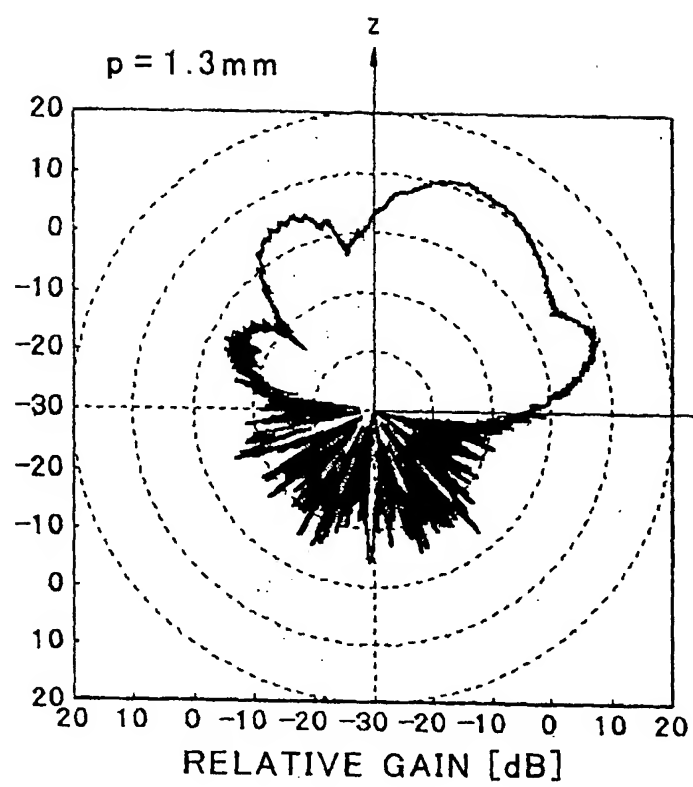


Fig. 12

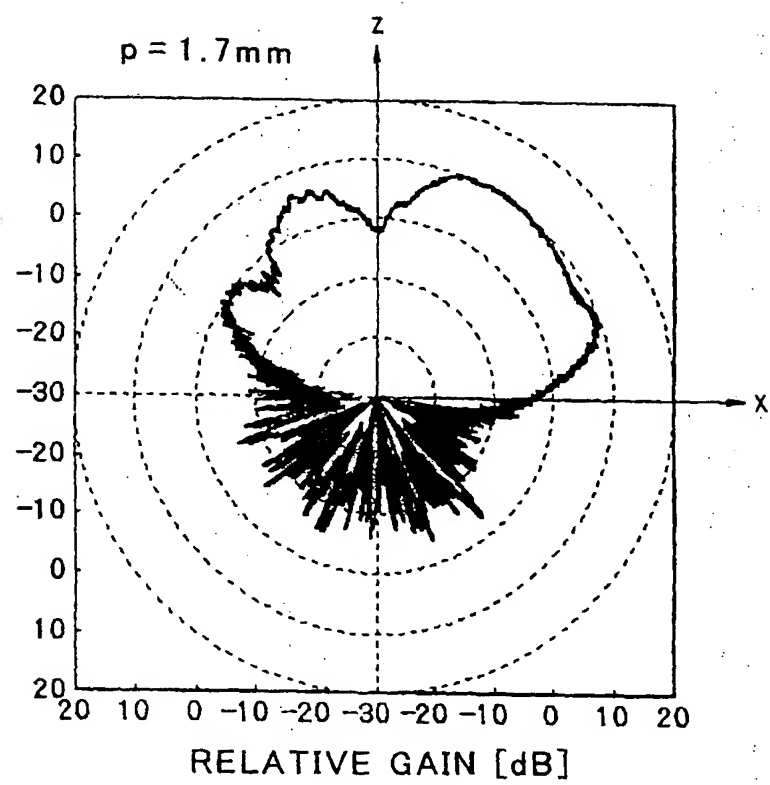


Fig.13

FIRST MODIFIED PREFERRED EMBODIMENT
OF THIRD PREFERRED EMBODIMENT

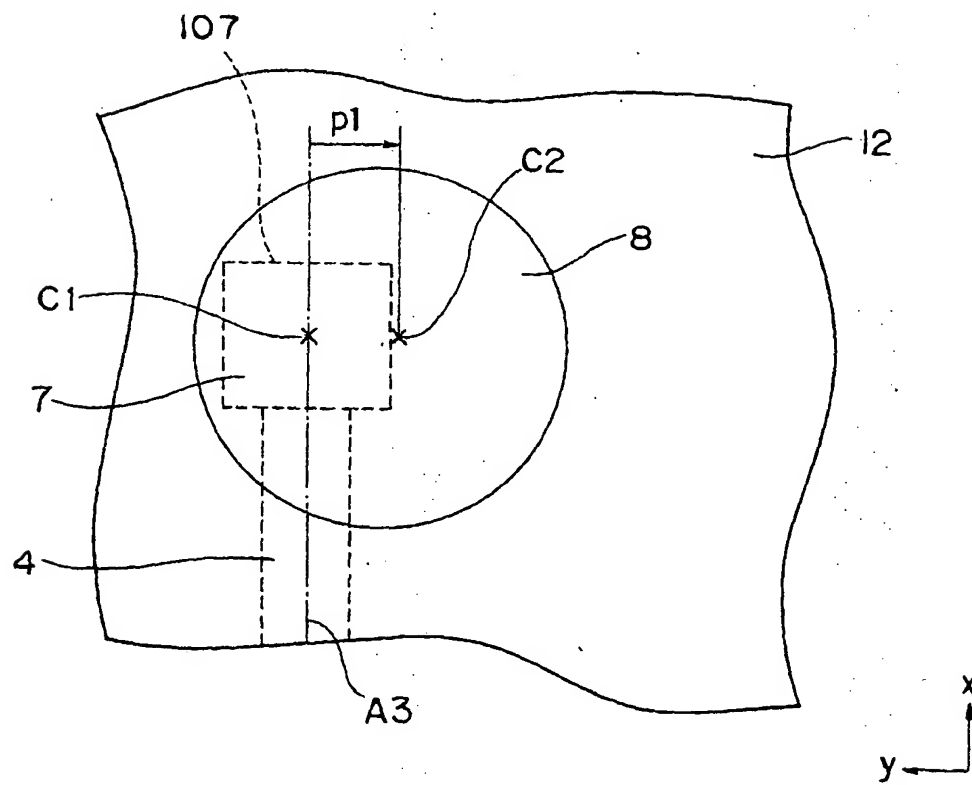


Fig.14

SECOND MODIFIED PREFERRED EMBODIMENT
OF THIRD PREFERRED EMBODIMENT

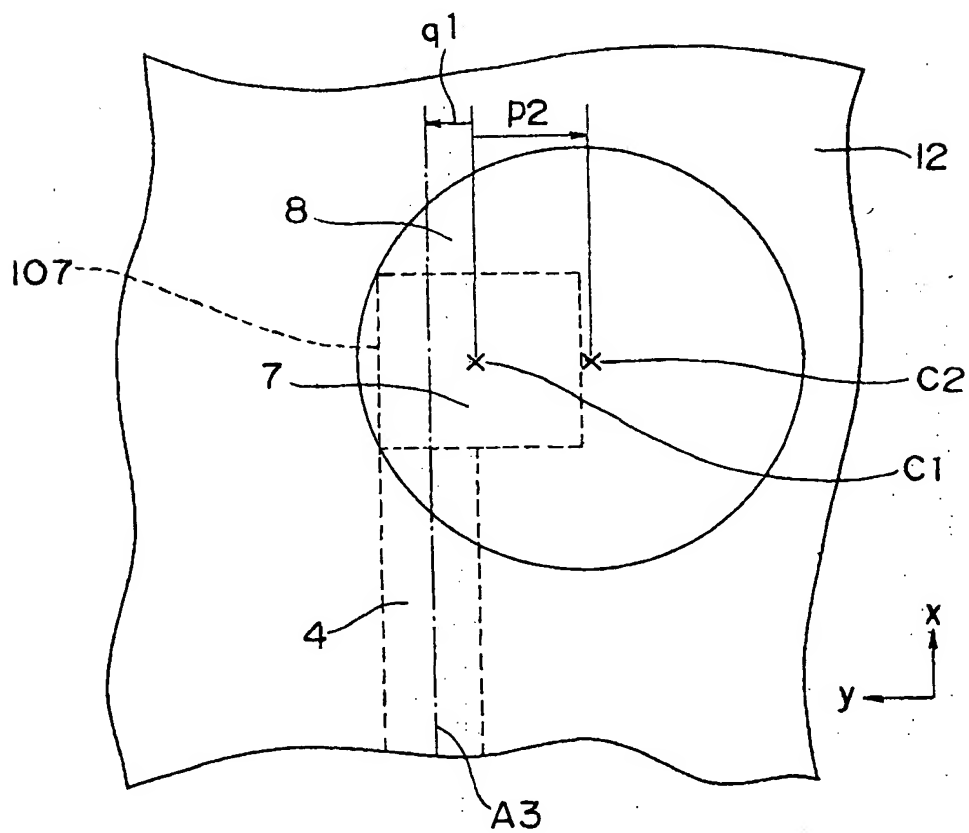


Fig.15

THIRD MODIFIED PREFERRED EMBODIMENT
OF THIRD PREFERRED EMBODIMENT

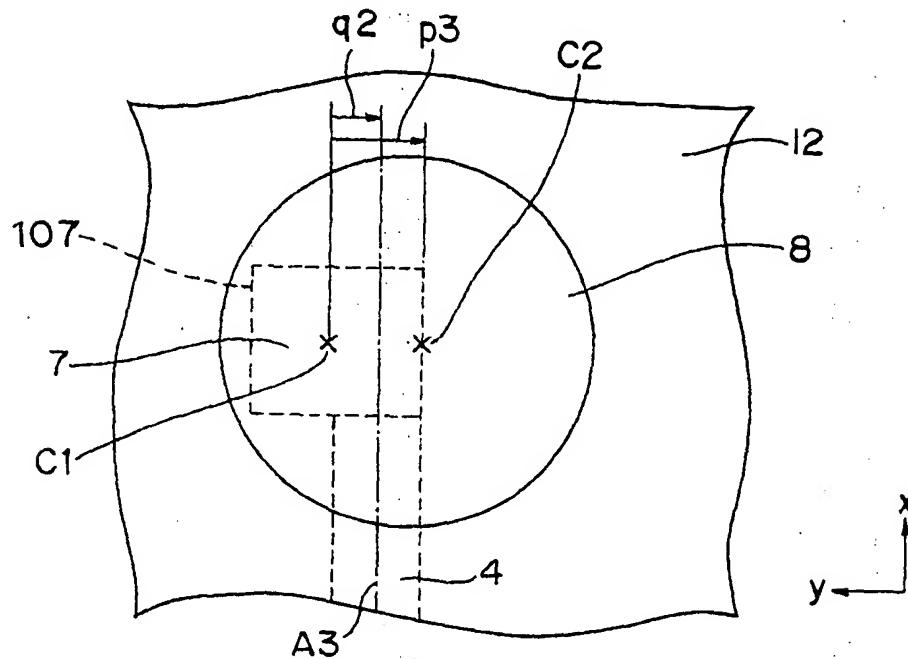


Fig.16

FOURTH MODIFIED PREFERRED EMBODIMENT
OF THIRD PREFERRED EMBODIMENT

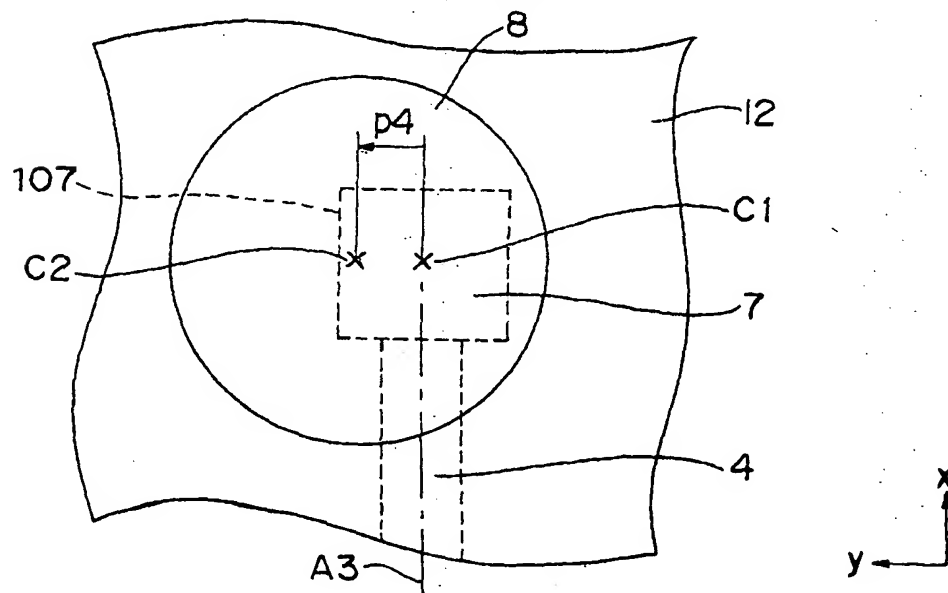


Fig.17

FIFTH MODIFIED PREFERRED EMBODIMENT
OF THIRD PREFERRED EMBODIMENT

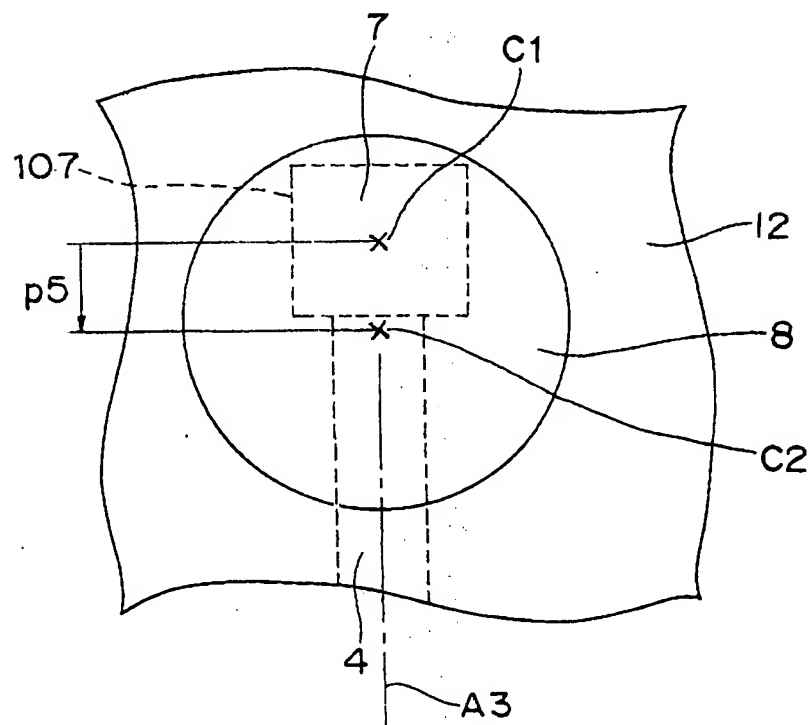


Fig.18

FOURTH PREFERRED EMBODIMENT

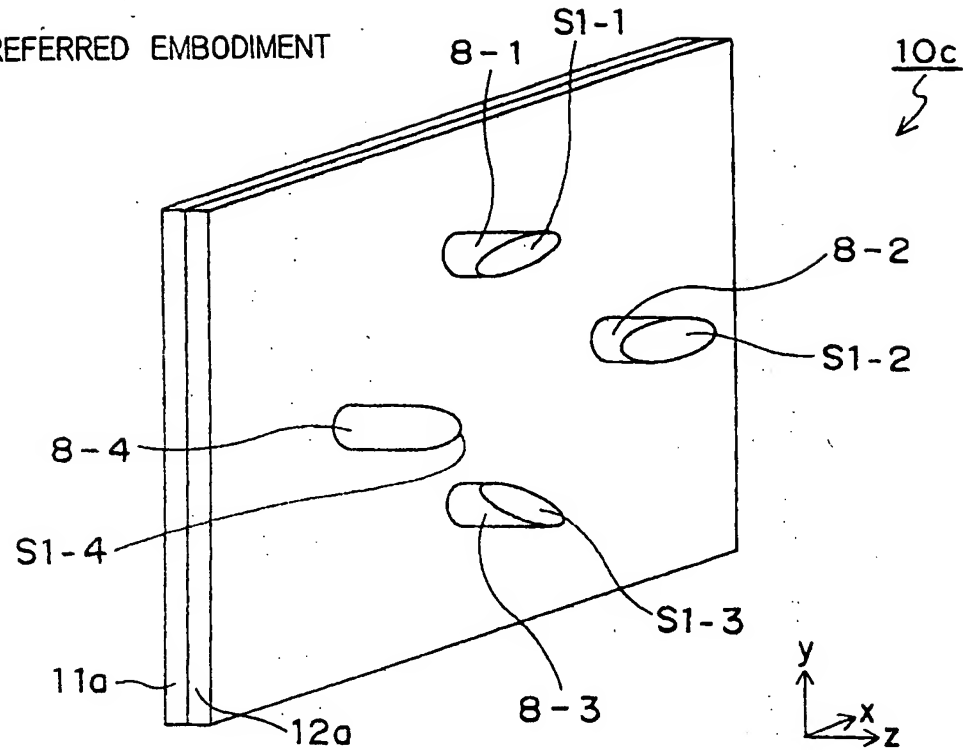


Fig.19

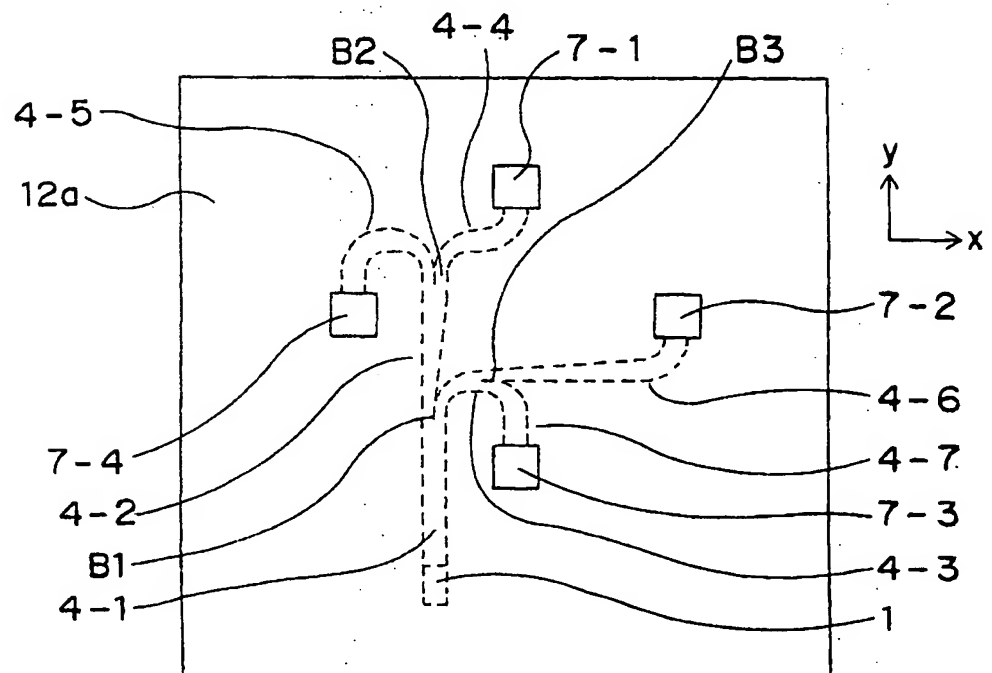


Fig.20

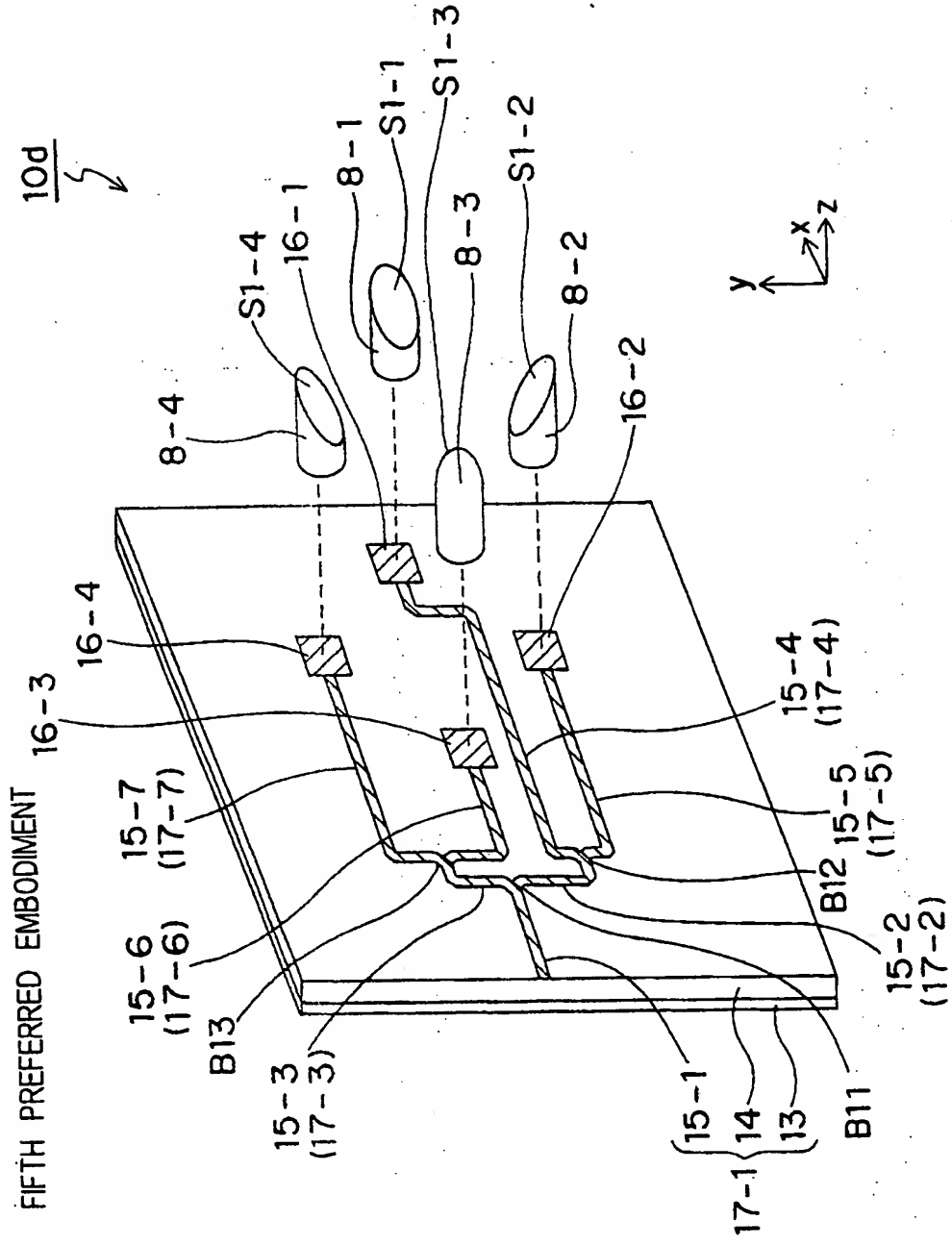
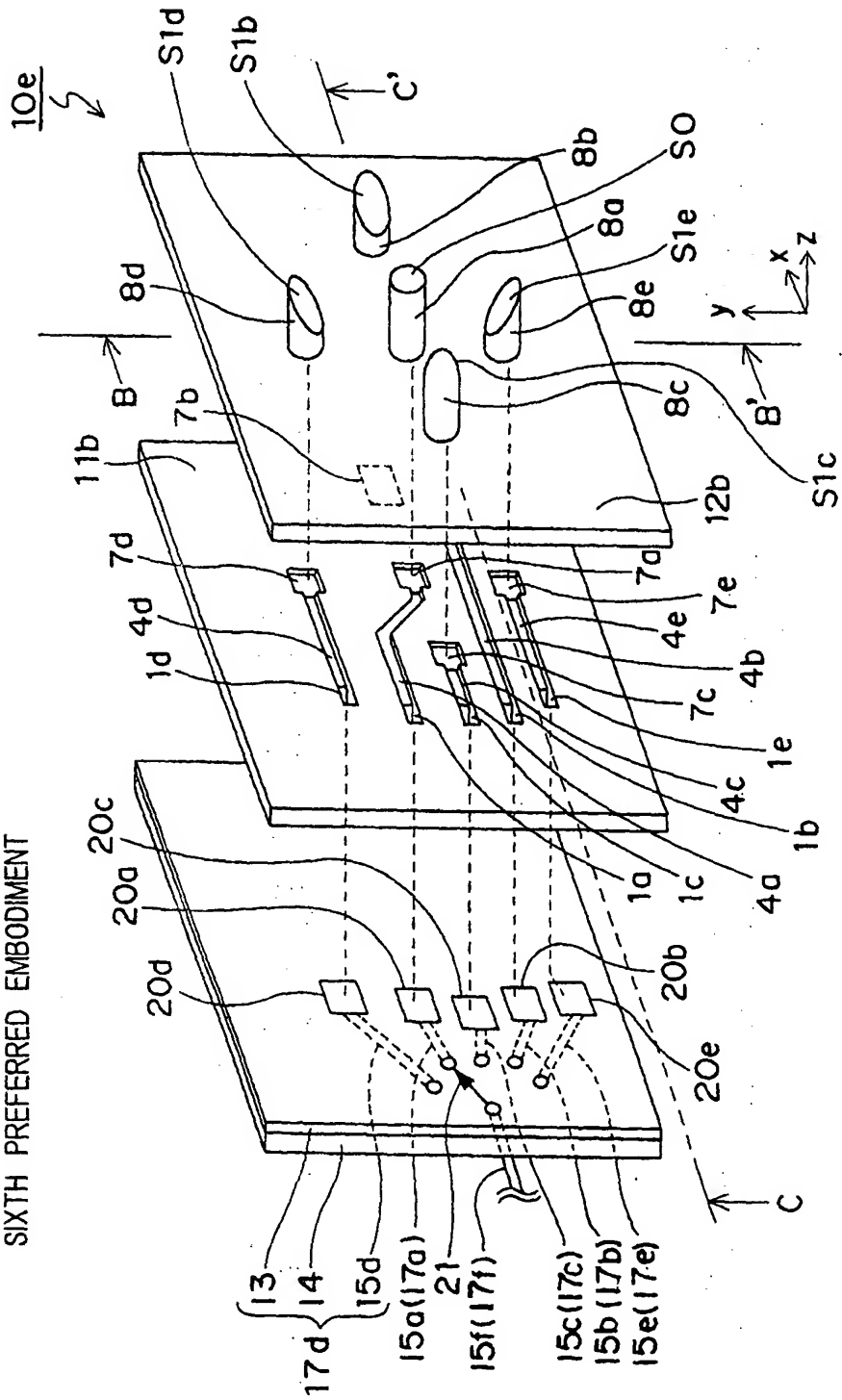


Fig. 21

SIXTH PREFERRED EMBODIMENT



This cross-sectional diagram illustrates a semiconductor device with several layers and components. A substrate 11b is shown at the bottom, with a coordinate system indicating the y-axis pointing left and the z-axis pointing up. Above the substrate are three main regions labeled 7d, 7a, and 7e from left to right. Region 7d contains a stack of layers 6d and 5d, which is part of a larger structure 8d. This structure is supported by a base layer 12b. A vertical channel or opening Ad2 is formed through the structure 8d, with its width indicated as pd. The top surface of the structure 8d is labeled S1d. Region 7a contains a central block 6a (layer 5a) surrounded by a material 4b. This is also supported by a base layer 12b. The top surface of the central block is labeled SO. Region 7e contains a stack of layers 6e and 5e, which is part of a larger structure 8e. This structure is supported by a base layer 12b. A vertical channel or opening Ae2 is formed through the structure 8e, with its width indicated as pe. The top surface of the structure 8e is labeled S1e. The entire device is capped with a layer 11b.

Fig.24

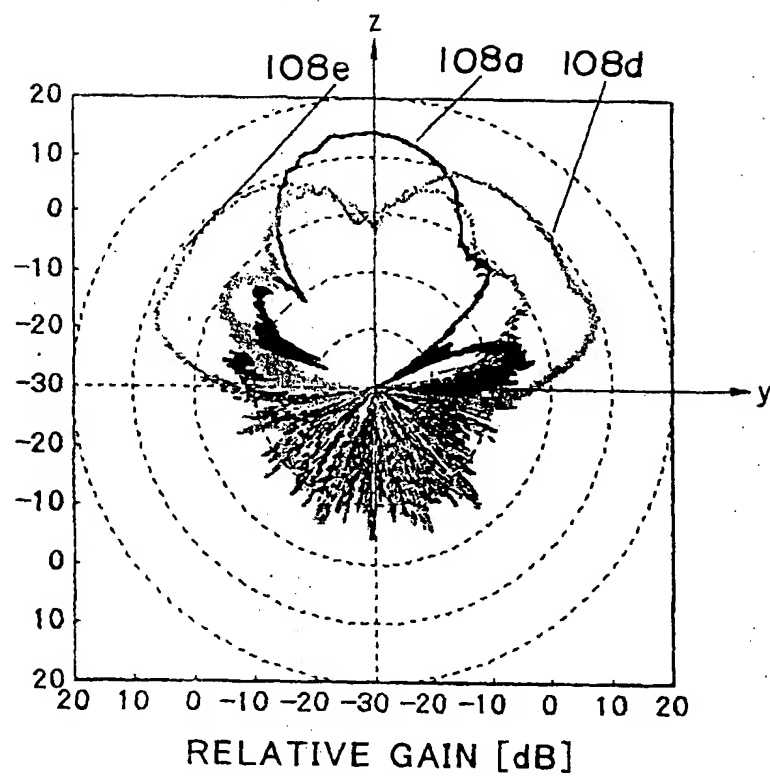


Fig. 25

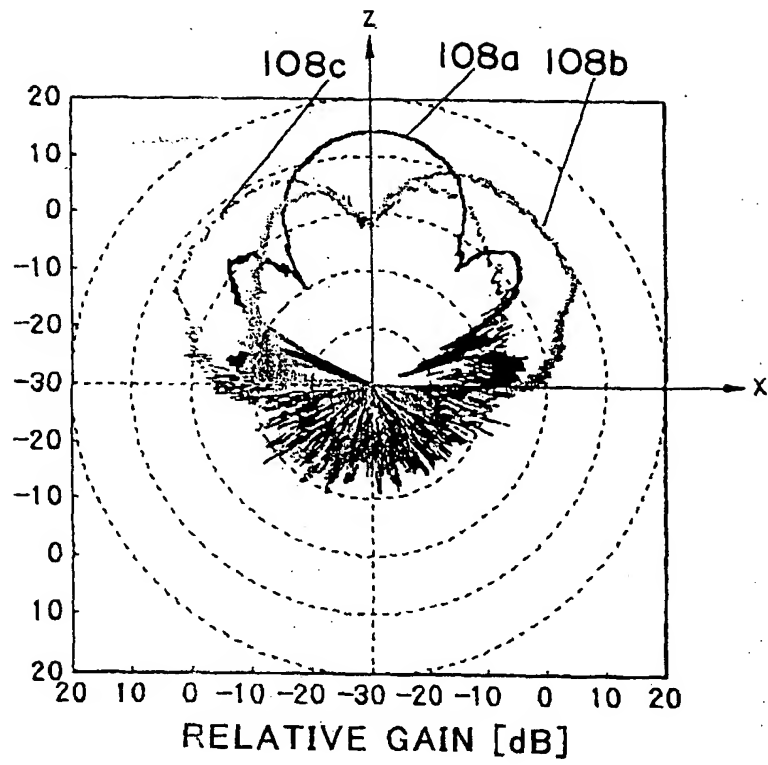


Fig.27

SEVENTH PREFERRED EMBODIMENT

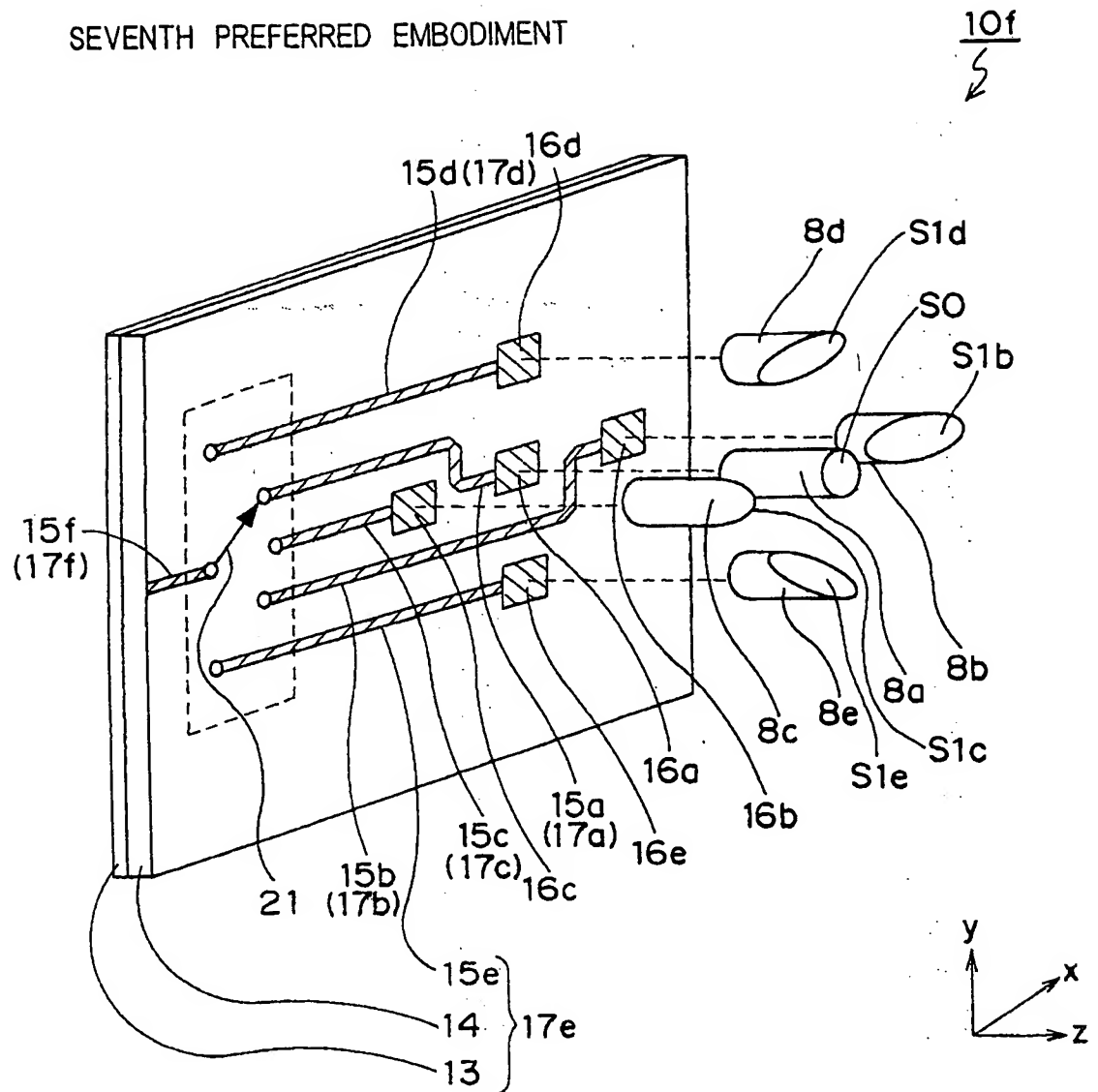


Fig.28

FIRST IMPLEMENTAL EXAMPLE
OF SIXTH AND SEVENTH PREFERRED EMBODIMENTS

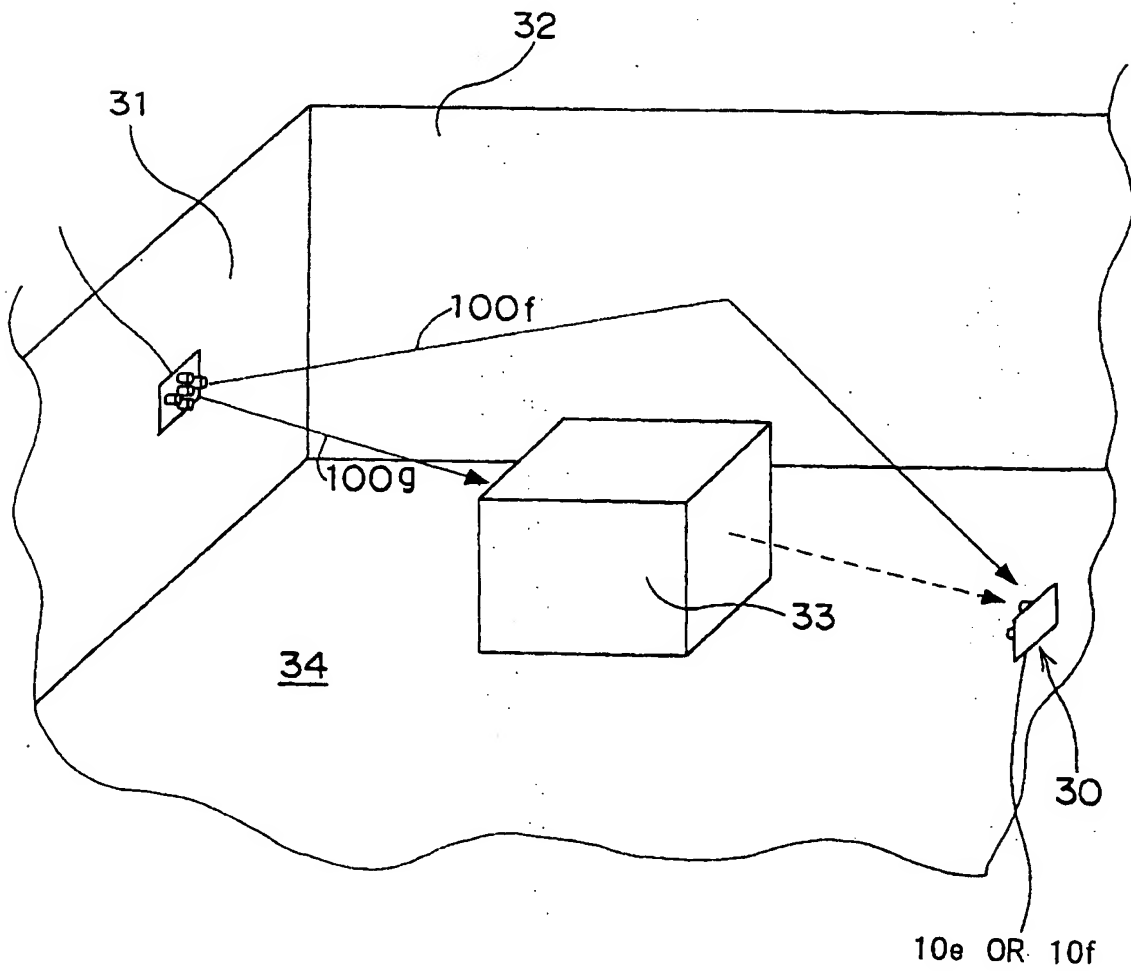


Fig.29

SECOND IMPLEMENTAL EXAMPLE
OF SIXTH AND SEVENTH PREFERRED EMBODIMENTS

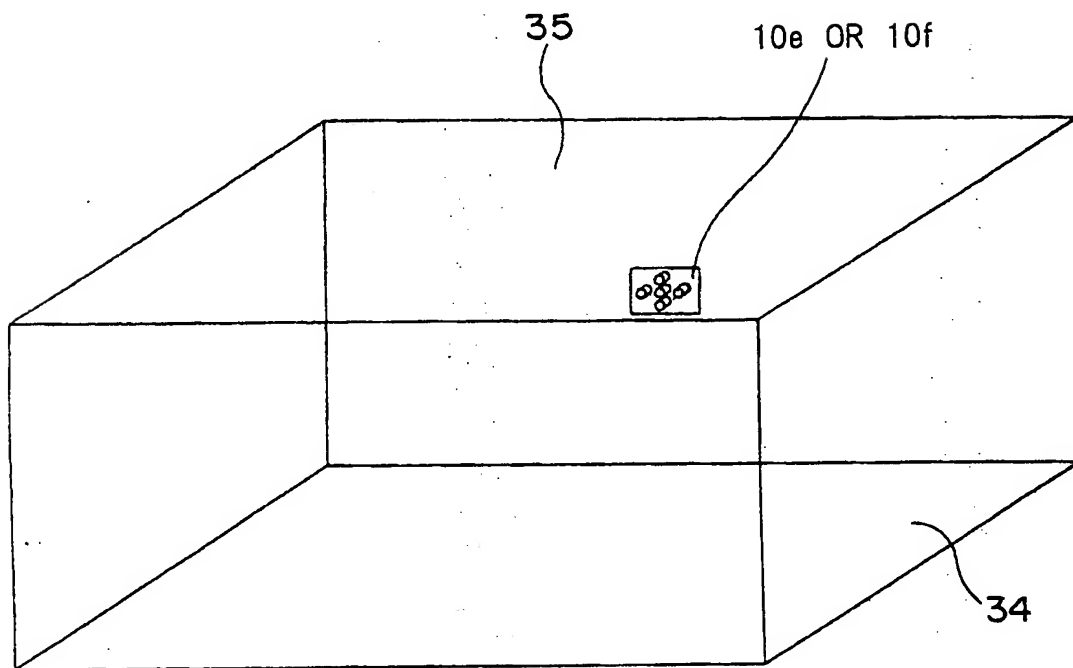


Fig.30

FIRST MODIFIED PREFERRED EMBODIMENT
OF SIXTH AND SEVENTH PREFERRED EMBODIMENTS

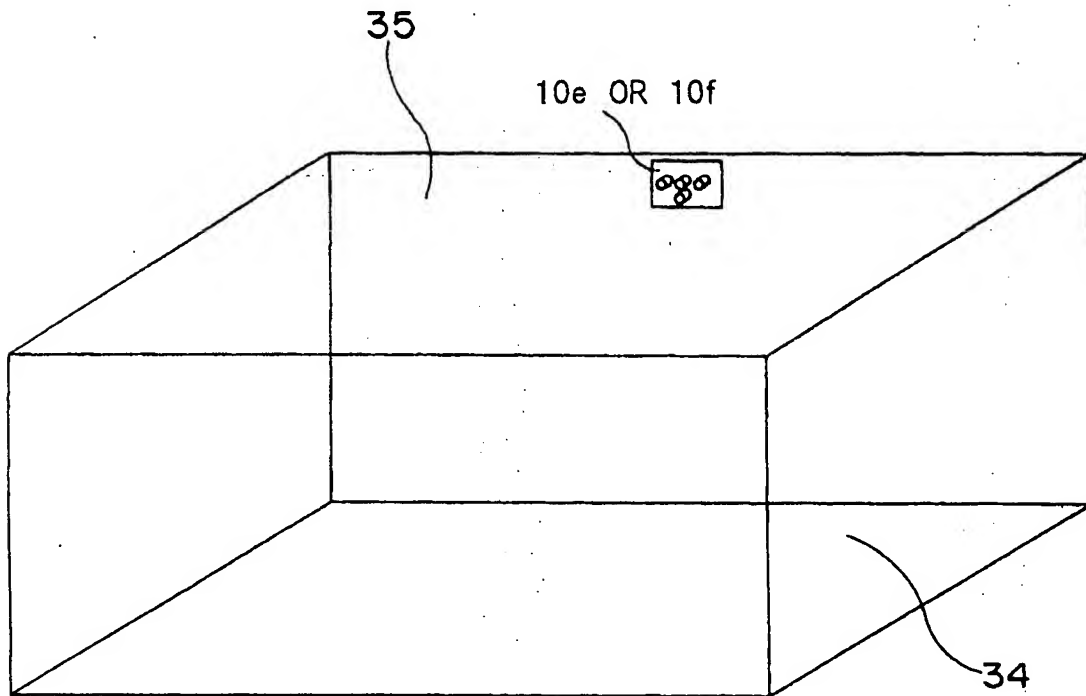


Fig.31

SECOND MODIFIED PREFERRED EMBODIMENT
OF SIXTH AND SEVENTH PREFERRED EMBODIMENTS

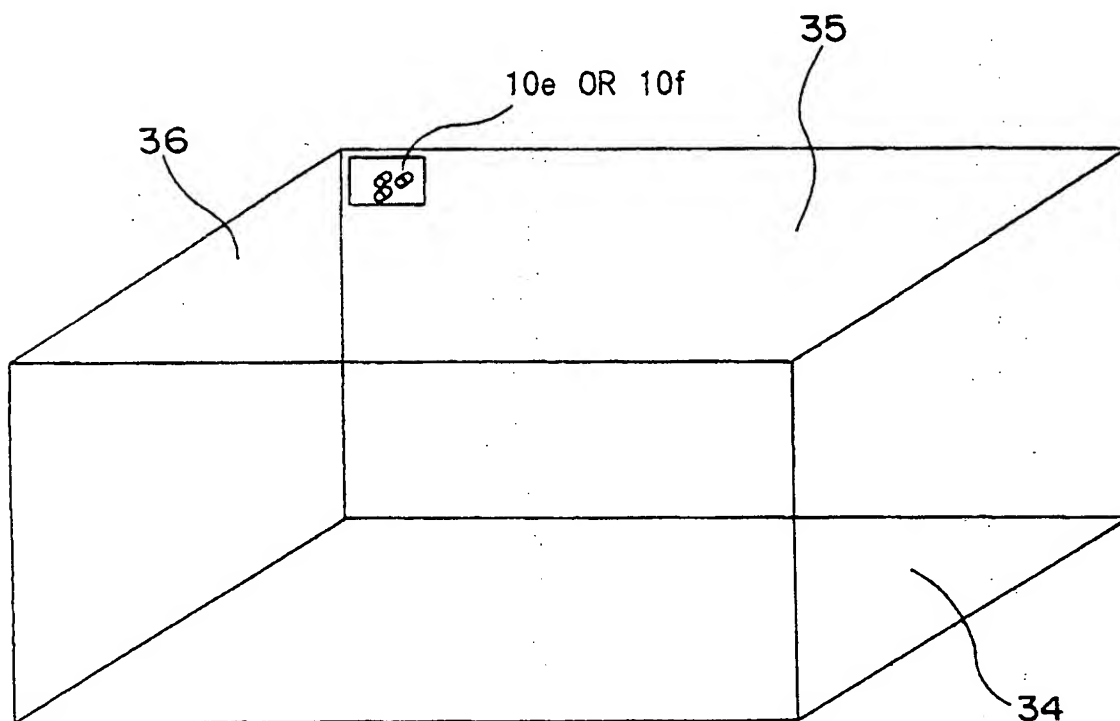


Fig.32

EIGHTH PREFERRED EMBODIMENT

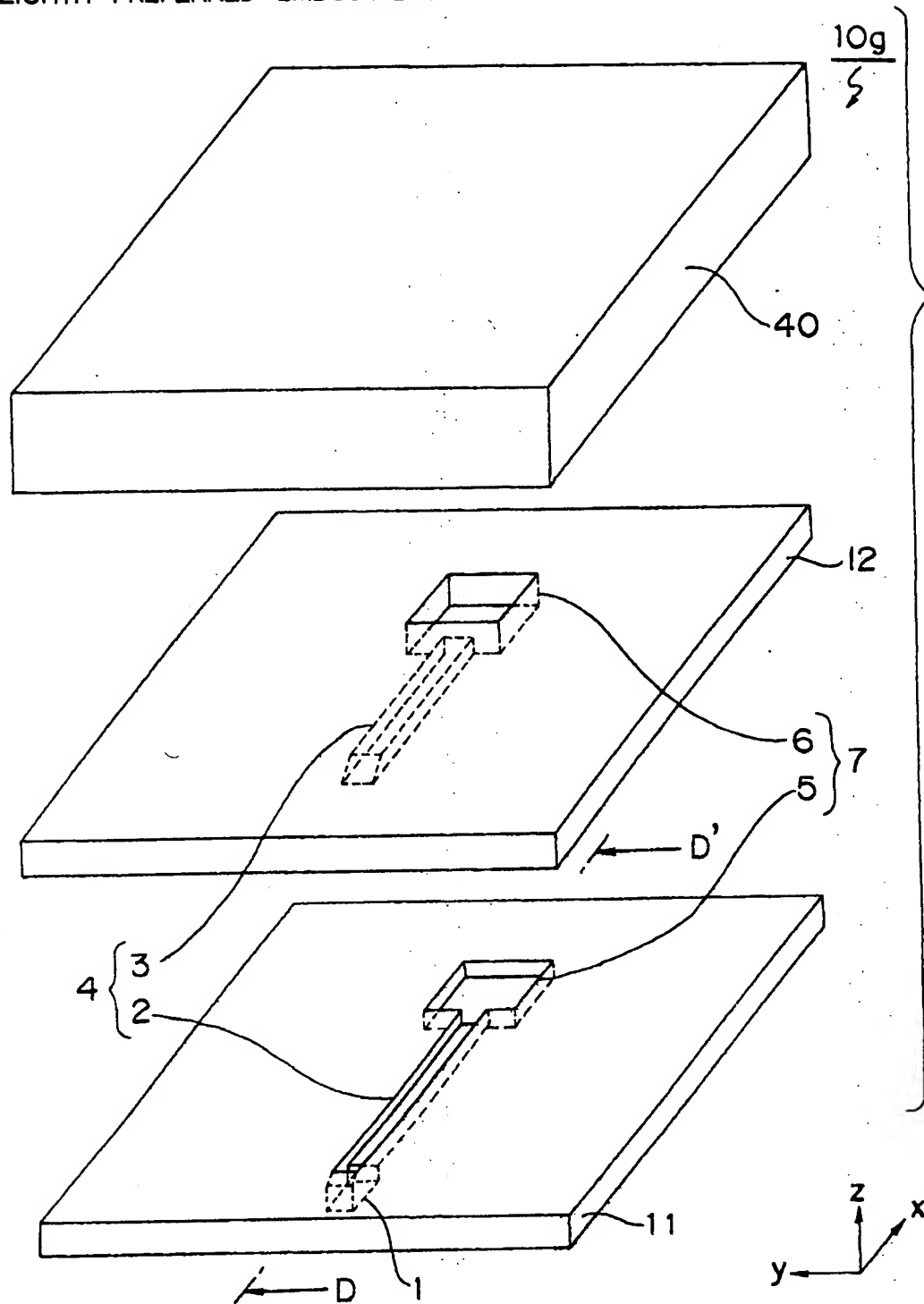


Fig. 33

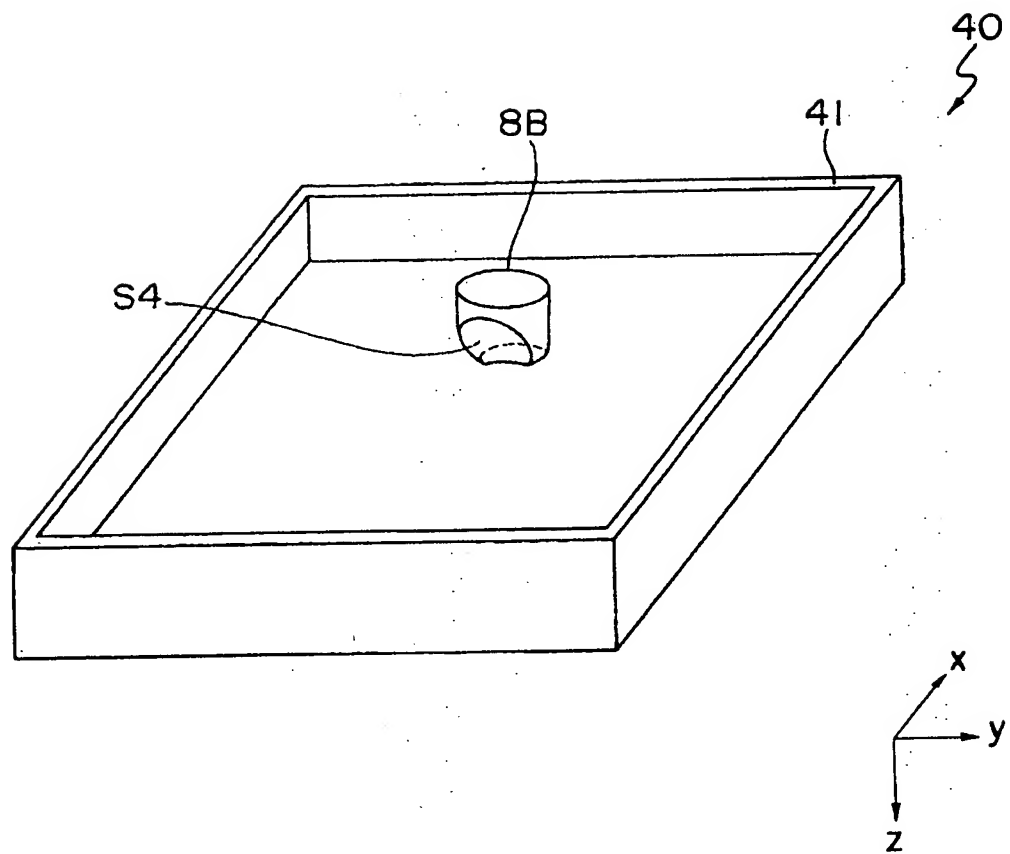
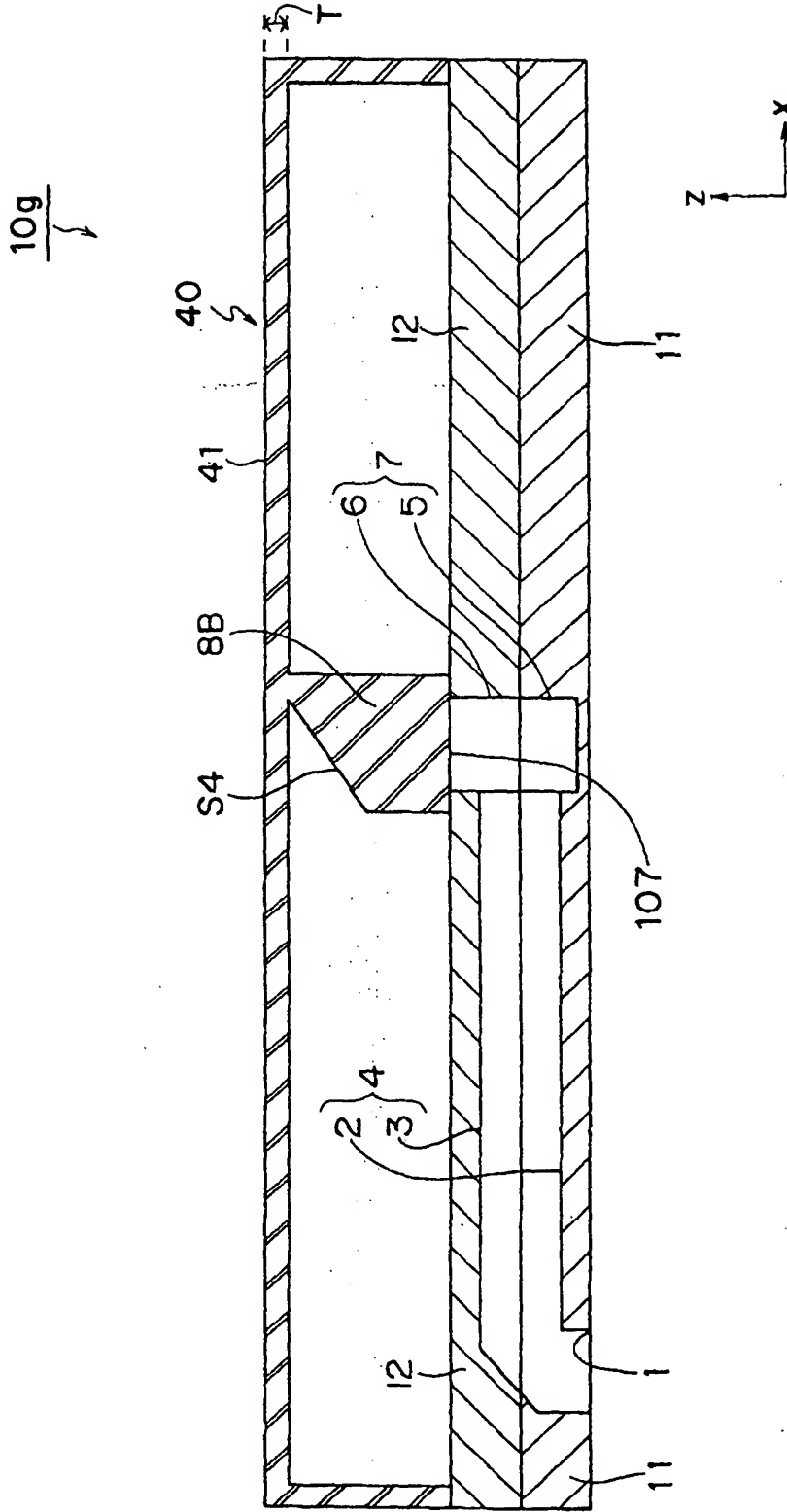


Fig. 34



NINTH PREFERRED EMBODIMENT

10h

The diagram illustrates a perspective view of a multi-layered display device. The top layer, labeled 10h, contains a grid of elements including 15a, 15b, 15c, 15d, 15e, 15f, 17a, 17b, 17c, 17d, 17e, and 17f. Below this is a layer with elements 20a, 20b, 20c, 20d, 20e, and 20f. A central region is labeled 13 (17e). The bottom layer includes elements 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. A coordinate system (x, y, z) is shown in the upper right corner.

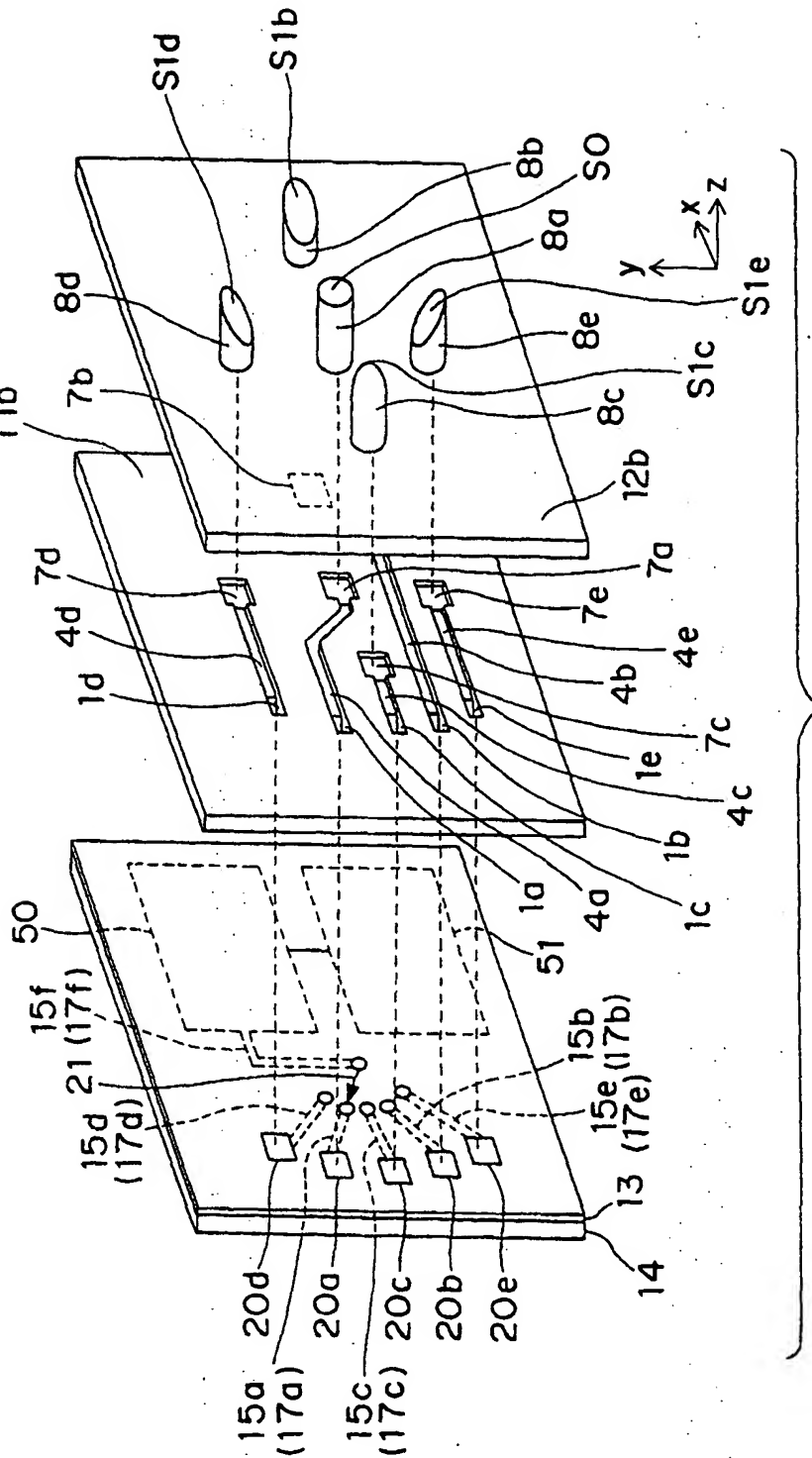
$$\frac{10h}{\text{ } \searrow}$$


Fig.36

MODIFIED PREFERRED EMBODIMENT
OF NINTH PREFERRED EMBODIMENT

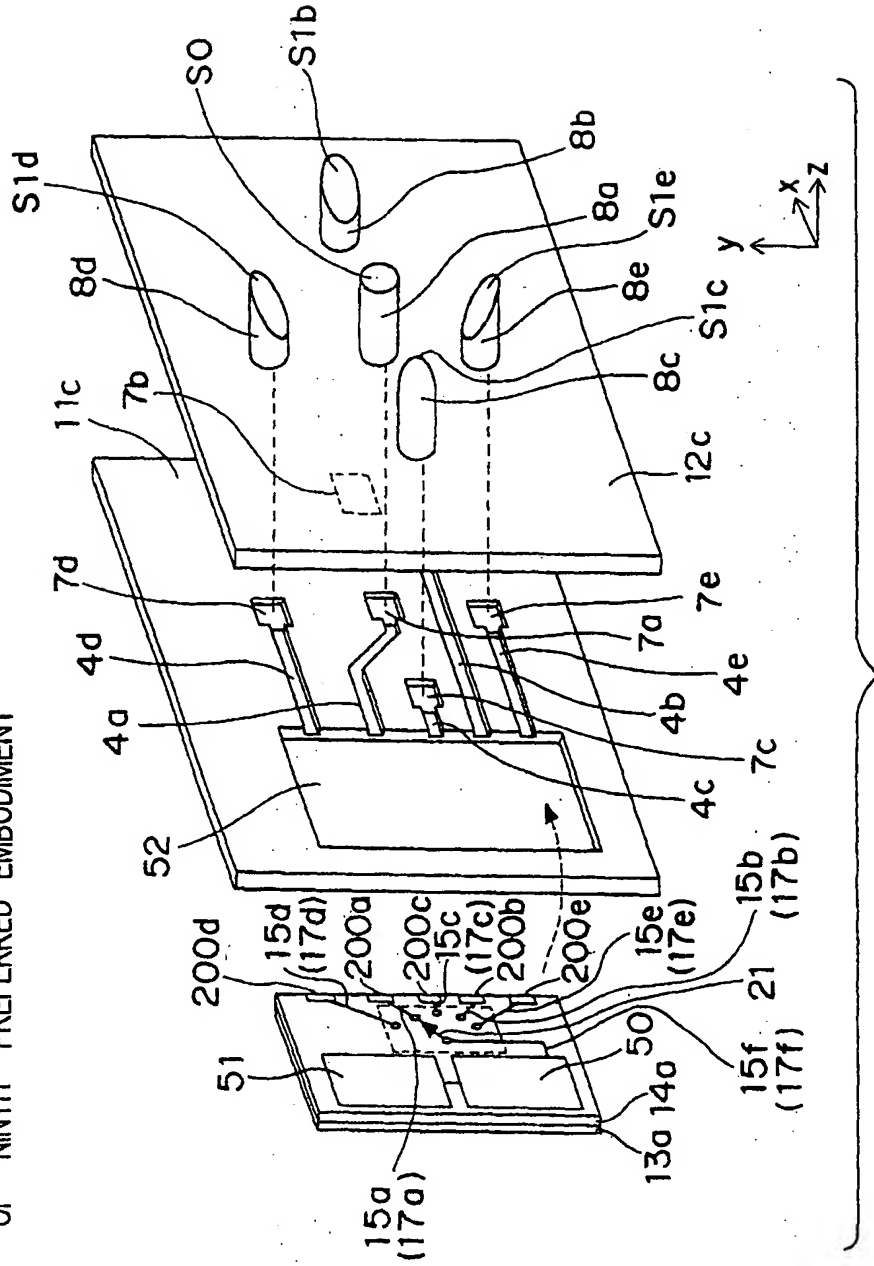


Fig. 37

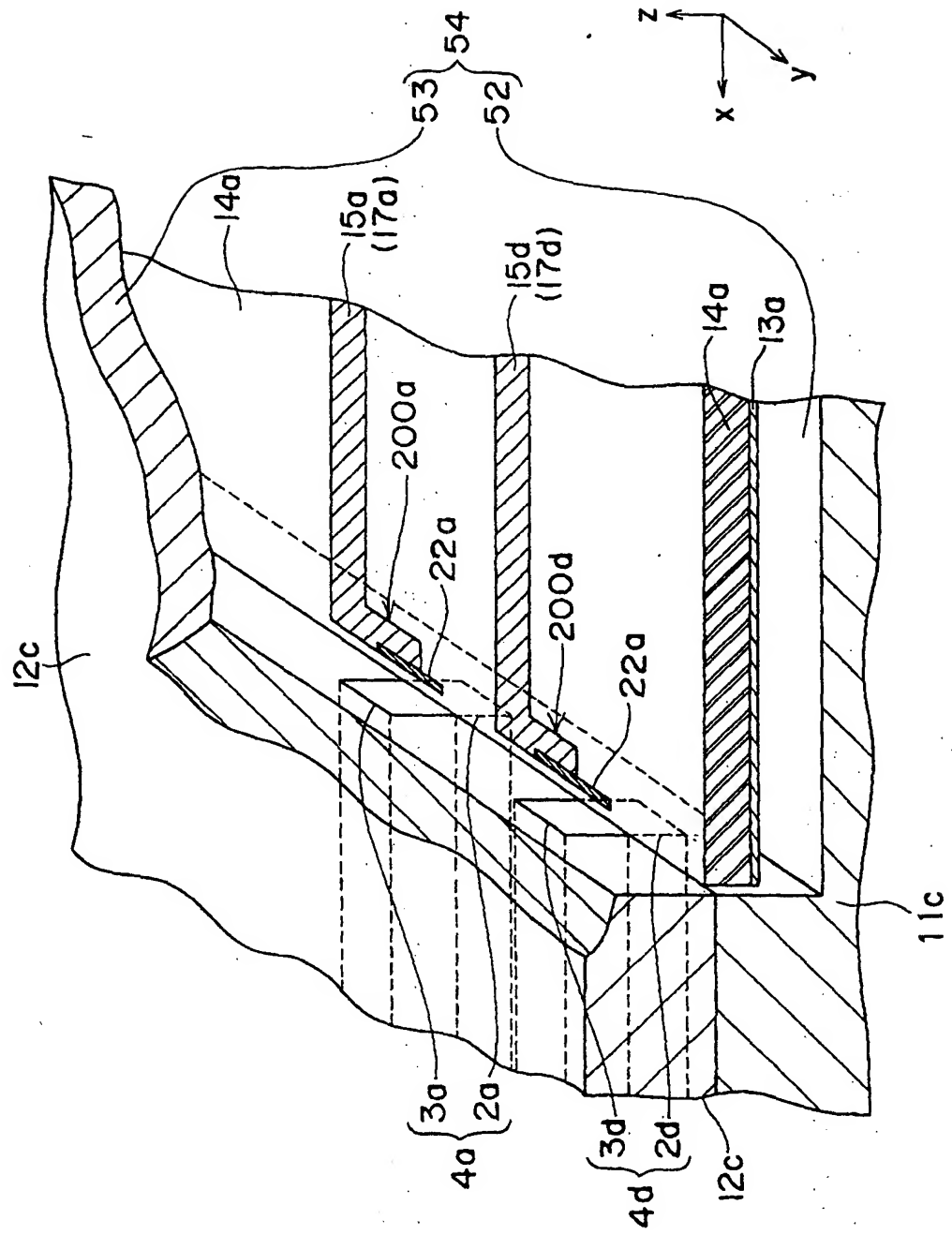


Fig. 38

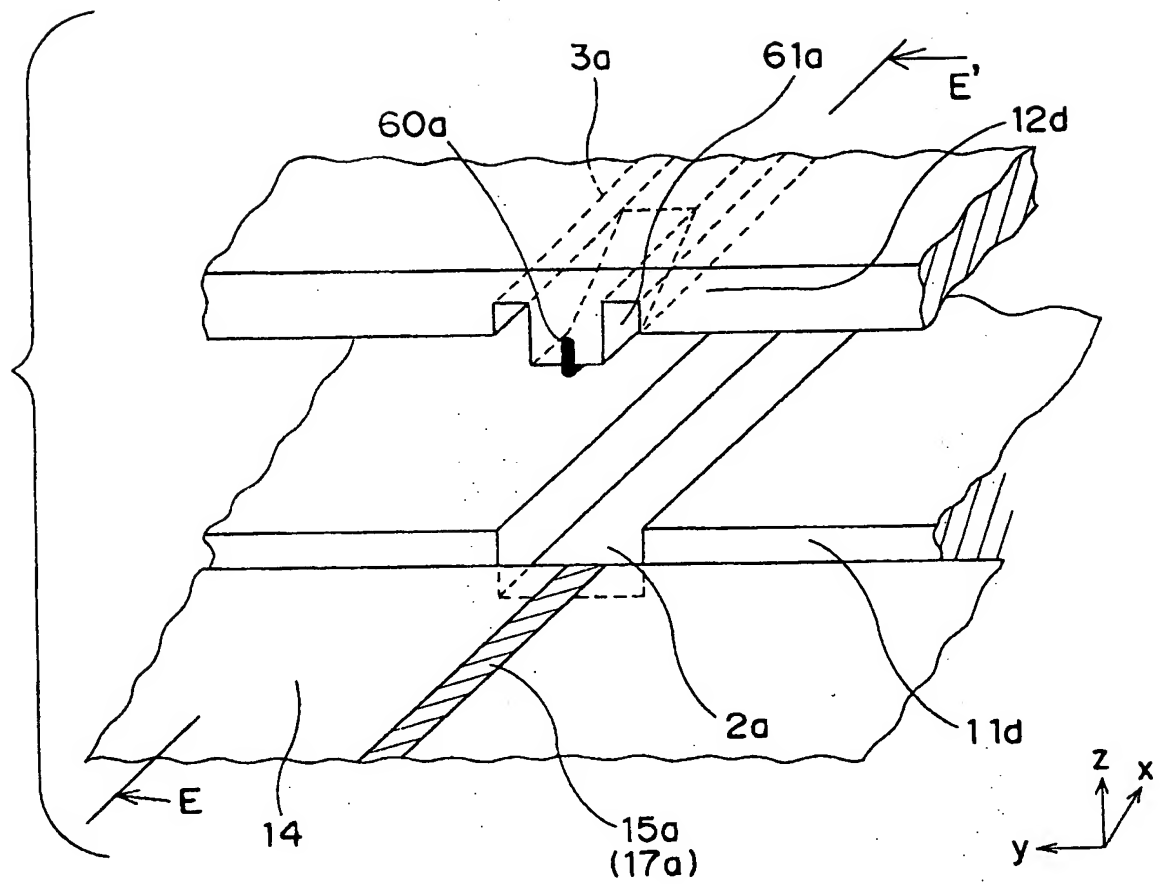


Fig. 39

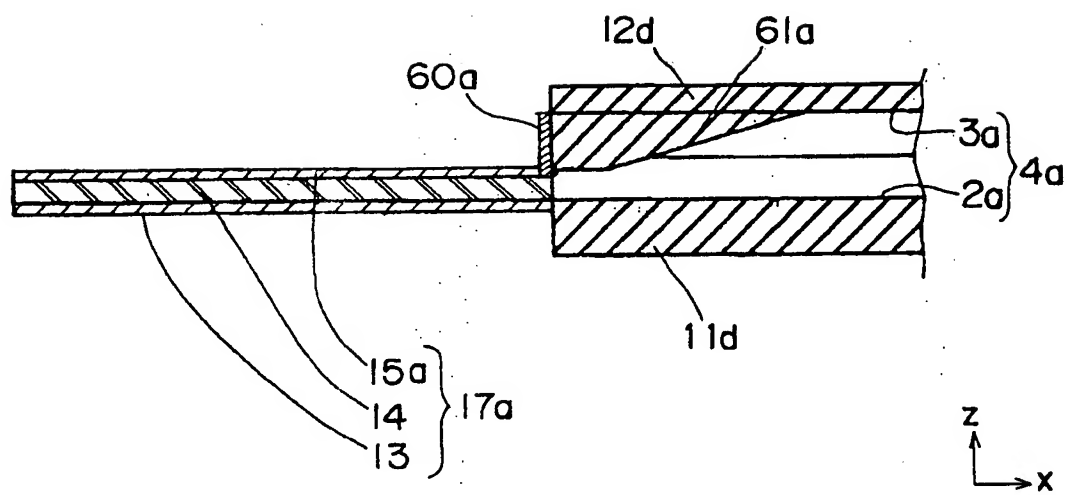


Fig. 40

TENTH PREFERRED EMBODIMENT

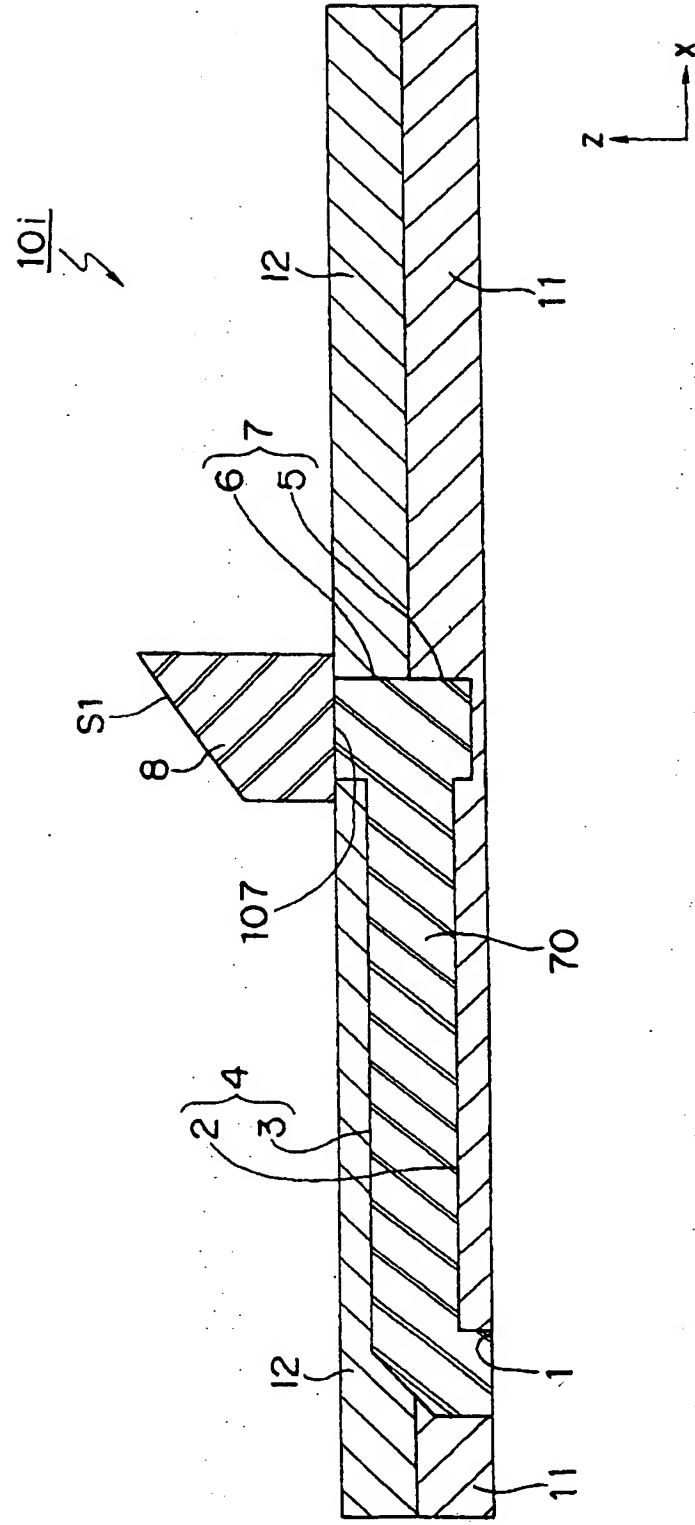


Fig.41 PRIOR ART

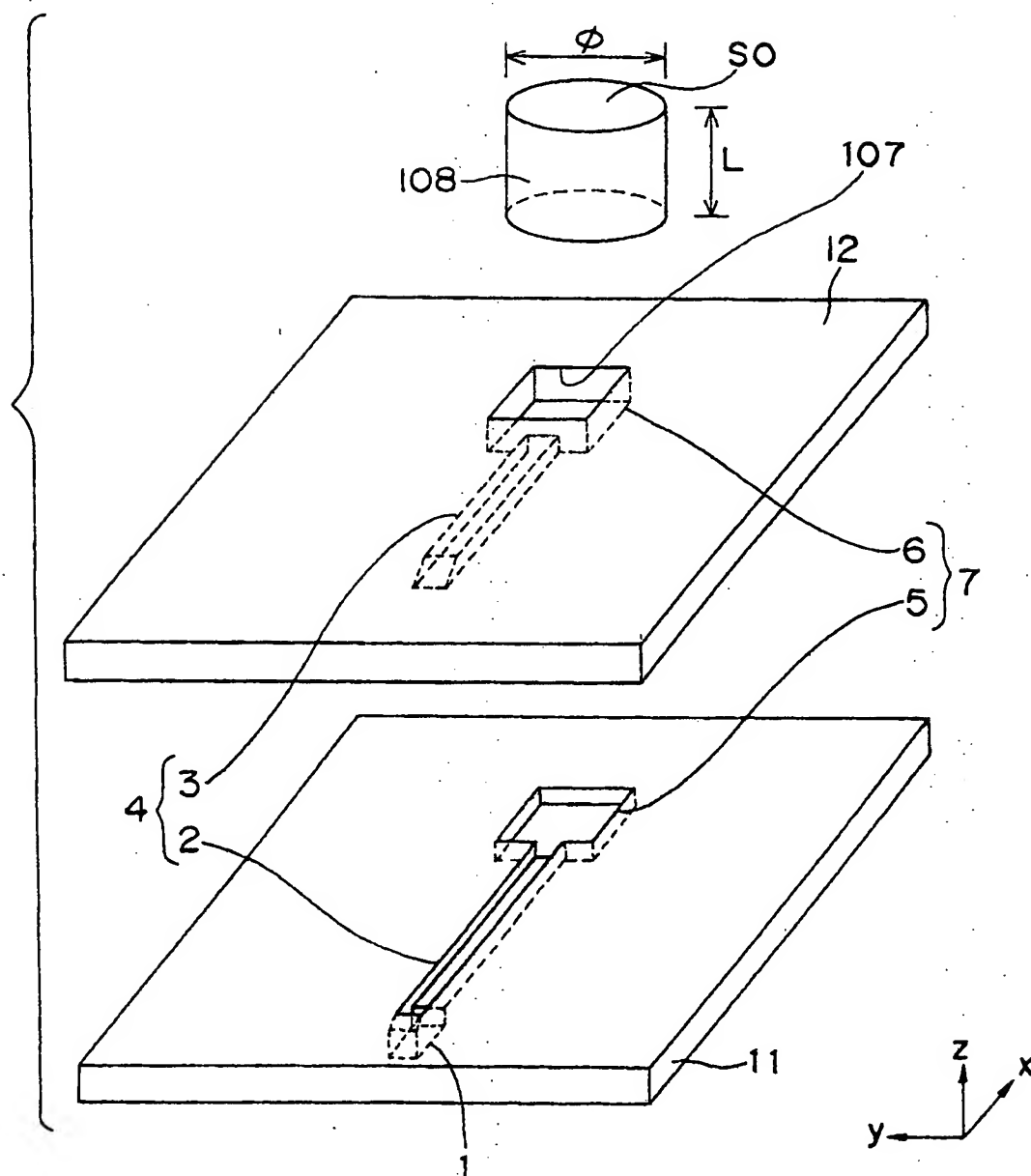


Fig. 42 PRIOR ART

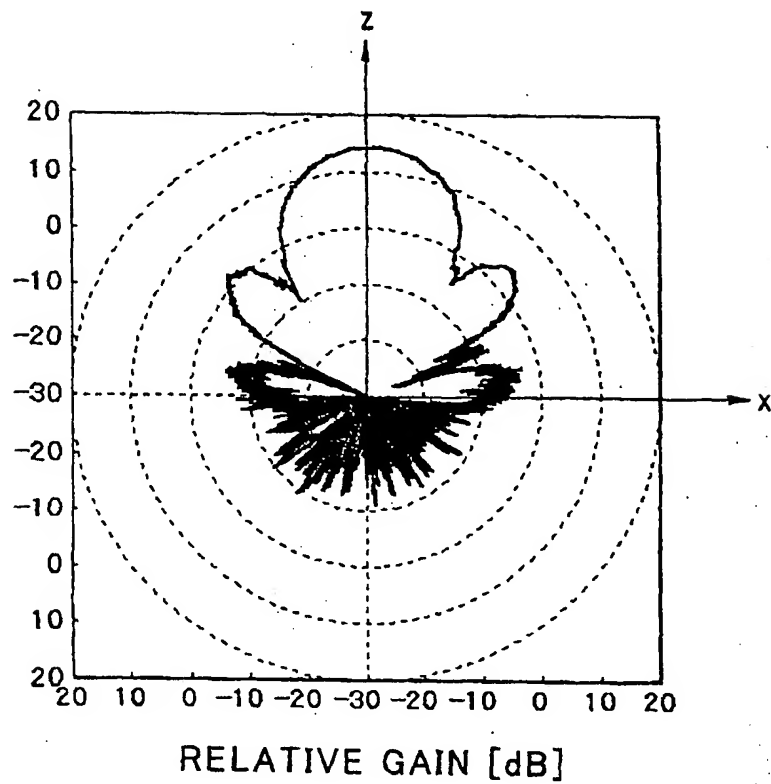


Fig.43

MODIFIED PREFERRED EMBODIMENT
OF FIRST PREFERRED EMBODIMENT

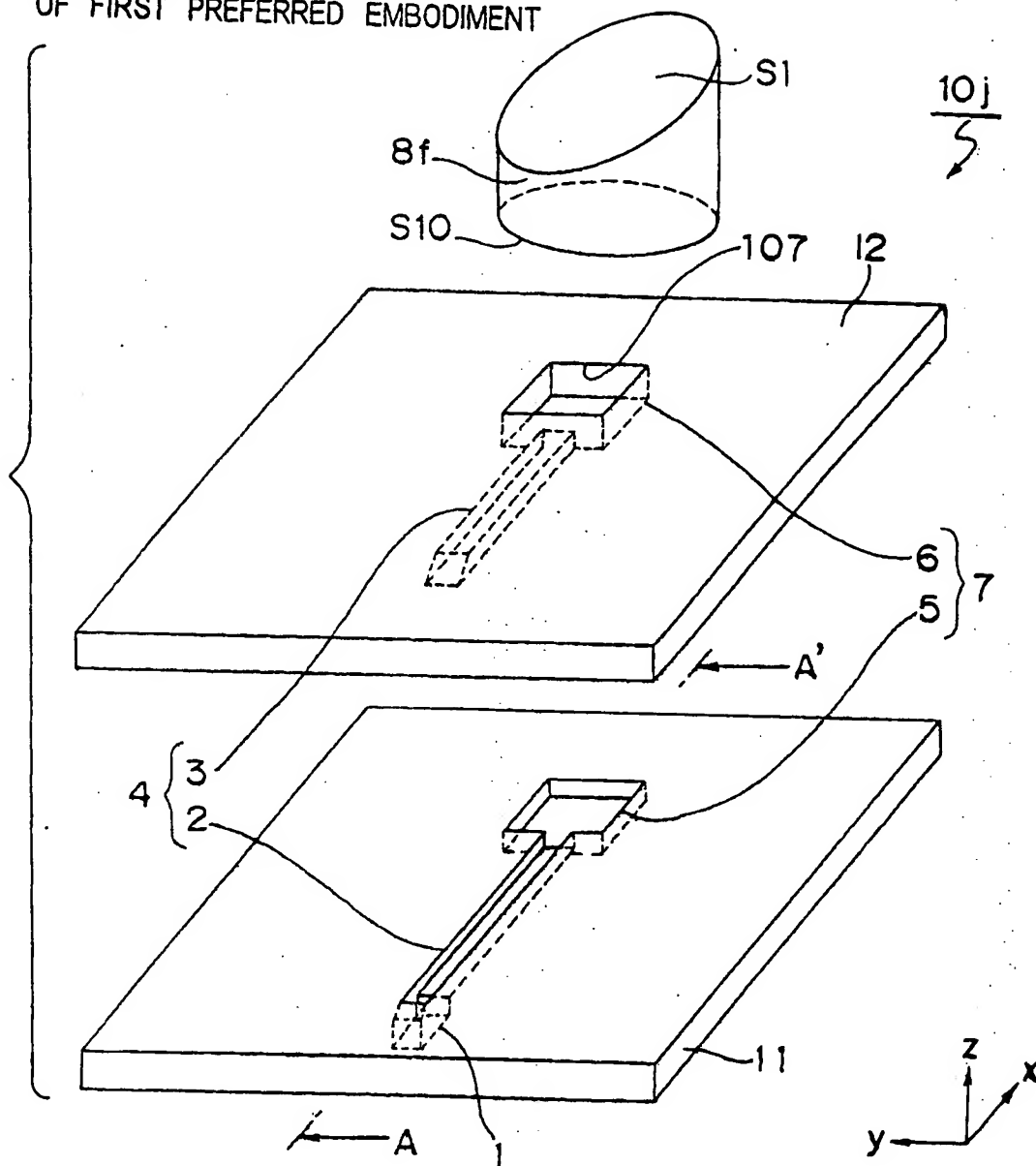


Fig. 44

ELEVENTH PREFERRED EMBODIMENT

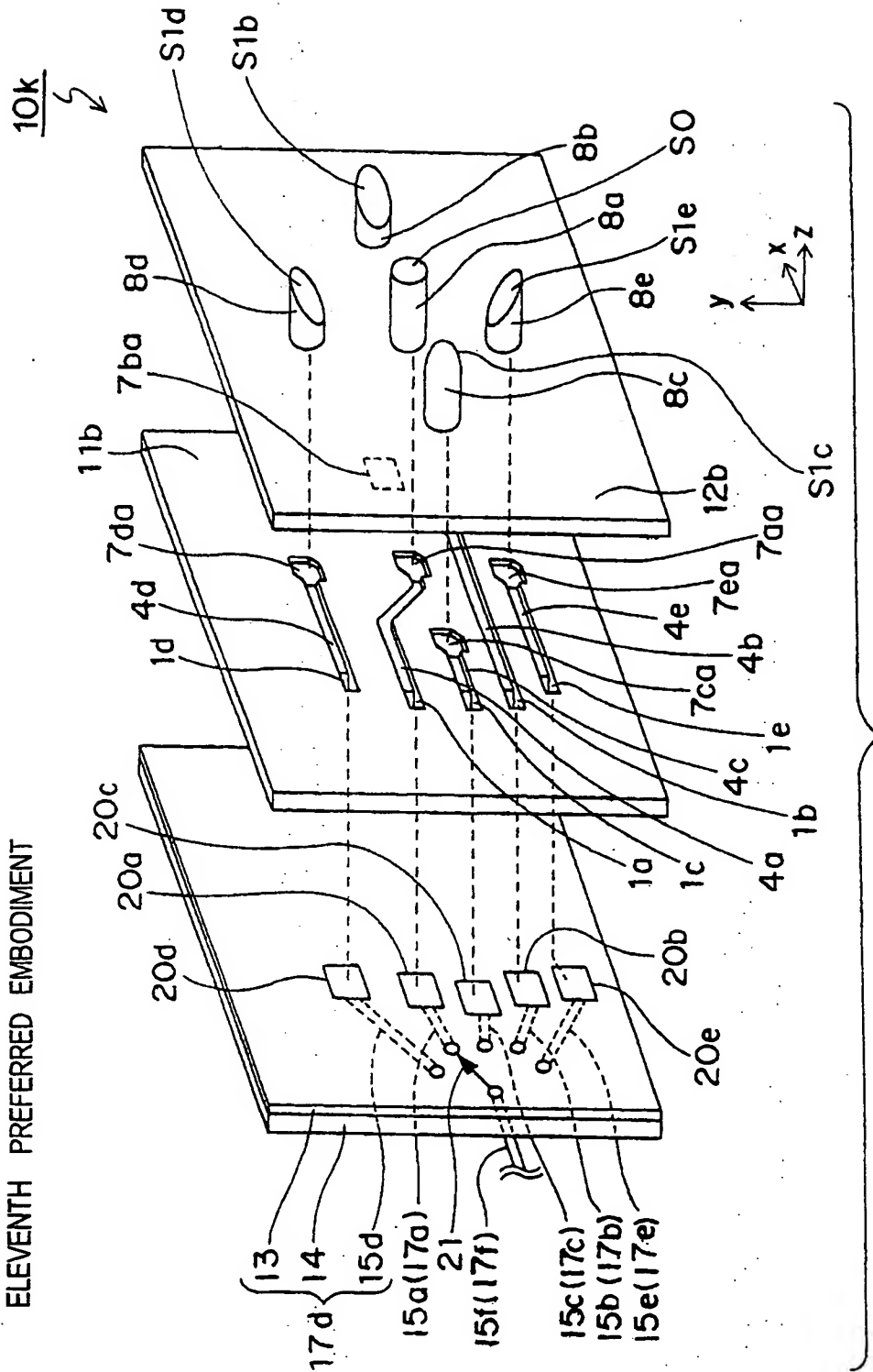


Fig. 45

ELEVENTH PREFERRED EMBODIMENT

